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TO MY WIFE MABEL MUNSON WOOD A TRUE COMPANION AND HELPMEET THIS BOOK IS DEDICATED



The religious situation in America to-day seems far from being ideal. On the surface there is criticism, pessimism, belligerency, neglect, or honest bewilderment. The reasons for these conditions are not primarily moral as in the days of the Wesleys in England, but intellectual. This term, intellectual, is used in the sense of beliefs and would express the fact that men of to-day are searching for religious truth which they can believe. We believe that there is present to-day among us an active idealism, and moral qualities of inestimable value. But we feel hampered because of the absence of absorbing, captivating, soul-stirring, religious beliefs.

The sources of this situation are plainly discernible. The middle of the last century marks the beginning of present religious thinking. At that time there was a distinct uniformity in the presentation of what christianity is and teaches. The main items were: Hell fire; eternal damnation; the inspiration of the Bible; no salvation for the heathen; salvation by faith; the grace of God; sin; baptism; and heaven for those who believed and were faithful. Salvation was individual and not social. To doubt was one of the greatest of sins.

A spirit of unrest and of revolt began then to express itself, which, when fortified by the acquisition of new knowledge has been functioning ever since. The concrete

evidence of the working of this new spirit is the presence of the many varieties of present-day isms. There is the Mental Science movement initiated by P. Quimby now manifest in its two large branches, Christian Science and New Thought. There is Spiritualism, Mormonism, and all the others. But the three movements which have profoundly influenced religious thinking are: Evolution, the Higher Criticism and Socialism.

The year 1859 witnessed the rebirth of the idea evolution and the revamping of the theory into its distinctive form, organic evolution. The conquest of this idea and theory has been phenomenal, and has extended far beyond what sober scientists could have foreseen. The epochal moment in relation to religious thinking came when some men of science determined to leave their own field and venture into metaphysics, philosophy and even theology. These thinkers determined upon the establishment of science as one of the big three: theology, philosophy, science. This goal was reached but the accomplishment of the aim only seemed to whet the appetite for further conquest. As in the case of the camel and the tent, when science once found its head inside the tent of the intellectuals it decided to occupy the whole tent. Instead of being satisfied with a science-theology claim was made to the whole of theology and religion. A religion of science ensued which has now arrived at the point where it is declared to be the real christianity.

Unlike Christian Science, this new religion decided against external forms and organization and elected to live in and control modern religious thinking. This inner life was possible because it has become the fashion to ac-

cept evolution uncritically. It is almost taking one's life in his hands to venture a critical examination of this modern fetish. Unless, however, we mistake the signs of the times, there is setting in a strong tide away from this uncritical and worshipful attitude. This tendency is more marked among philosophers and the true scientists than among the religious scholars and leaders. The times now call for a religious and moral evaluation of the principles of science and the theory of evolution upon which this religion of science is based.

There is one note of regret which is strong through this whole work. It is that so much emphasis falls upon the negative side. This tendency toward criticism and negation, instead of toward constructive production is entirely too prevalent. We seem to-day to spend our strength throwing Hell fire and assisting grace out of the window; throwing epithets of warm composition at the ecclesiasticism and conservatism of the day; showing the faults and evils of every modern religious offering; driving men of modern views out of educational and other positions of influence; in short, disposing of our religious beliefs much more than trying to shape the truth of christianity into modern life-giving form. We would wish, however, to express the intention in this work in clear form, which is a critical evaluation of this Religion of Science, and not a desire to negative. It is hoped that an effort to help meet the present hunger for a positive, rational faith may be soon undertaken.

Special acknowledgment of thanks is made to the following men whose recent books have brought much valuable help and inspiration. To Professor Conklin for his cour-

age in following Haeckel and others out into the open and thus giving us a concrete expression of the religion of science. To Professor Cooley for his clear and masterful appraisement of the principles of science. To Professor More for his incisive treatment of the limitations of science. To Professor Hocking for his rational idealism and philosophical expression of deep religious insight. To Professor Hudson for his clear defense of the truths we live by. To many others who may recognize their own expressions occasionally.

A bibliography is appended but the pages are not loaded with references. We have the feeling that this has been often overdone. If, however, our use of material has exceeded the bounds of hospitality we are ready to make amends.

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CHAPTER ONE

THE ISSUE

In 1873 Draper in his "History of the Conflict Between Religion and Science" gave utterance to a prophecy which has been amply fulfilled. "We live in a day," he wrote, "when a new departure on an unknown sea has been taken." He observed that whoever has had an opportunity of becoming acquainted with the mental condition of the intelligent classes in Europe and America must have perceived that there is a great and rapidly increasing departure from the public religious faith; and that, while among the more frank this divergence is not concealed, there is a far more extensive and far more dangerous secession private and unacknowledged. This new departure is away from the "compression arising from traditionary faith," and though he did not use the exact words, it is towards a religion of science.

Evidences of this secession both open and private need not be enumerated. It is sufficient to recall the many and manifold criticisms that have been and still are being hurled at the church and against her leadership. From press and platform, from friend and foe alike, the "heckling" for some time has been continuous and searching. It is a fact, however much we dislike to repeat it, that the intellectual classes—using this word intellectual in its customary sense—are not interested in the church nor in her doctrines and teachings. This does not mean that these

thinkers are irreligious or non-religious. The fact is, they feel they have found a better religious faith than that presented by the ecclesiasticism of the day. Such investigations as those made by Professor Leuba are to the point in this connection.¹ College teachers know the present student attitude toward traditionalism and ecclesiasticism. These students like many others see clearly the distinction between the church and religion, and while profoundly idealistic they feel the lack of that grip which they think religion, if properly presented, would have on them. It is putting it mildly to say that there is to-day a coolness toward traditionary faith.

The ecclesiastical leaders and their friends are not unaware of the present condition of things. Many reasons are being offered in explanation of these untoward facts, but among these two hold the position of prominence. The Higher Criticism and the Theory of Evolution are rated as the real causes; and this diagnosis of the case applies to many within the church as well as to certain groups on the outside. The Higher Criticism, it is claimed, by putting the Bible on a level with all other literature has taken away from the authority of scripture; by introducing the literary and historical method of interpretation it has upset beliefs held for years by scholarly men; and through its use no belief or interpretation is left secure. Its findings not only contradict teachings held on good authority but even contradict Jesus himself. The natural result is that it reduces religious enthusiasm and tends toward skepticism. Proof of this is found in

¹ Leuba, "The Belief in God and Immortality."

the frequent observation that where this modern method prevails religion is at a low ebb. There is therefore a definite issue to-day between religious truth and the so-called Higher Criticism.

There is also a definite issue between those who seek to maintain the fundamental verities of the faith and those who accept the theory of evolution. The number in this latter group is known to be very large, and for years now, to have been decidedly on the increase. The statement of the writer in the Encyclopædia Britannica on evolution need not be accepted at face value yet approaches the truth. "In the Twentieth Century writers on biological subjects no longer have to waste space in weighing evolution against this or that religious tradition—supporters of religious tradition have made broad their phylacteries to write on them the new words."

The case that is made out against evolution and its devotees specially within the church is a serious one. Evolution dispenses not only with faith but with the God of faith. The hypothesis "God" seems not to be needed. Revelation is denied, the authority of scripture is impugned, miracles are laughed out of court, man is deposed from the high estate given him by the Bible and rated merely as a noble animal, naturalism is the accepted philosophy, freedom is made a clever deception and immortality applies only to the stuff of the human body. Since these criticisms are accepted as facts the case made out seems to be a valid one and the issue is therefore considered to be a clear one between the conservative and liberal leaders of the day.

But while the ecclesiastical leaders sense clearly the

fact, that there is an issue to-day between religion and science, the whole case is not stated by naming the liberal thinkers as the central point in the issue. It is true that many have accepted the higher criticism and evolution without delving deep enough into the meaning and implications of either this modern method of biblical interpretation or of this all-embracing theory. The influence of such thinkers is often too much destructive and productive of little that is constructive. The conclusion, then, that the prevailing skepticism and defection from orthodox faith must be laid at the door of these destructive critics is a natural one. But the real issue to-day lies deeper than this judgment declares. It is discovered when we review the history of the relations between religion and science during the last few years.

The present issue is comparatively modern though the warfare between these two great factors of human life is very ancient. We need not go back farther than the time of Hume and Kant. Following the critical work of these two epochal thinkers the conclusion was reached, that neither the method of empirical science which used sense observation only, nor the method of exact science which made use of the concepts of mathematics could establish any secure grounds for religious faith. Religion with its three great verities of God, Freedom and Immortality, must be found to rest upon more adequate foundations than an idea or a definition or principles which were purely theoretical. The result was the delineation of two well-defined parties—the party of science and the party of religion. The separation between faith and reason created the opportunity. When it was declared that the

great religious verities are absolute, lie beyond the range of reason, could not be proved but must nevertheless be believed, scientists were not slow to seize the opening and take possession of the field of reason. They were perfectly willing to leave the field of faith thus defined to the religious leaders. Thus reason or intellect was declared to belong to a different category and to stand sharply over against feeling, which was faith.

The breach or separation thus made and quietly accepted grew wider during the last century. Reason and faith grew more independent each of the other, while science on its side increased in physical value to mankind. The conviction also gradually deepened that enlightenment belonged to the science leaders because theirs was the rational leadership. Because of this mutual independence the tworoom, mental-apartment idea came to the fore. Men believed that they could hold the conclusions and theories of science and at the same time, in the opposite apartment, maintain their religious faith without any real contradiction. This is the belief so often expressed to-day, that there is no real war between religion and science; but at that time the explanation was given as outlined above. There was no conflict, because a man could be two men and hold his views, no matter how divergent, in soundproof, separated, mental rooms.

During the 19th century, for well-defined reasons, science, philosophy and theology came into such an entanglement that the province and task of each is not clearly defined even unto this day. Science properly declared its right to think and to think through to a system; hence it must deal with matters and problems usually declared

outside its right and sphere. Philosophy, because it deals with a first-cause, naturally tended to become identified with theology. Theology, which calls itself the queen of sciences, always claims the right to deal authoritatively with both primary and secondary causes. Referring to this entanglement, Perry writes: "Apparently compelled to choose between science and religion, it (philosophy) has itself divided into two parties: those who have followed science for the sake of its theoretical motive, and those who have followed religion on account of its subject-matter." The result is the two opposing philosophies—perhaps theologies—naturalism and idealism. The most farreaching result, however, of this entanglement is the creation of the modern science-theologian.

The popularity of this science-theology, called naturalism, increased rapidly, but not without meeting opposition. Soon the general view began to find acceptance, that this system of natural theology negated the fundamental verities of religion. As this conviction gained strength thinking men soon discovered that the separating wall between their dual mental-apartments did not separate. Then followed suspicion and hostility on both sides. From being friends religion and science abandoned the apartment for houses on opposite sides of the street. Science arrogated to herself more and more the claim to mediate all true knowledge to the world of mankind, because science and reason were practically identical. From the opposite side the defenders of the faith and even some men of science criticized searchingly this claim of their arrogant neigh-

^{1 &}quot;Present Philosophical Tendencies," p. 35.

bor; but when in a more conciliatory mood asked for a return to the former status quo. This was refused.

Then occurred the new turn in the historic conflict. This change came, not all at once but grew nevertheless very rapidly. Philosophy split into various camps and the friendly struggle between naturalism and idealism, and between idealism and idealism, with excursions into pragmatism and realism ensued. The religious leaders split into conservative and liberal and then apparently decided to fight out a waiting battle. With these antagonists thus engaged, science calmly and quietly proceeded to win the Age, with the result that this is the "Age of Science" and to a growing extent the age of the religion of science.

The story of this new turn in the conflict covers the period from the day of the appearance of Haeckel's "Riddle of the Universe" to the present. Every scientific movement, as Weber notes, gives rise to a philosophic movement; but such movements do not always give rise to a new religious ism. There are special reasons, however, why the latter has occurred in our day.

Haeckel, despite the many criticisms hurled at his head was a seer. He was not a seer in the biblical sense of this word, but he clearly foresaw the coming of a definite religion of science. To him it was evident, as it must be to every unbiased thinker, that the principles, theories, canons, beliefs, metaphysics and dogmas of science must inevitably lead to this conclusion if thinking will but be logical. He also was conscious of the influences which were pushing some scientists more and more into metaphysics and theology. The innate character of the theory of evolution, which demanded a universal system and a

system embracing the whole universe was apparent to him.

The reasoning which led up to this inevitable conclusion and which prompted this man of science to attempt to formulate a religion of science himself, seems well grounded. The conviction had seized many scientists, that the time had arrived, when they should advance from the menial position of being the hewers of wood and drawers of water for mankind, into the more exalted position of being thinkers. "To most minds it seems imperative to go on to metaphysical theory and it is better to do this frankly and deliberately than unconsciously and at random", is the plain statement of a scientific thinker. In another place the same author writes: "That the pernicious fallacy might be exposed that science can be pruned of its theoretical development and yet continue to bear fruit." This conviction carried with it the inevitable conclusion that the development of theory must embrace religion and morality. For he who has science and art has religion also.

Whether rightly or not Haeckel felt that there was a distinct call to the scientist to supply a present religious aching void so manifest among thinking men. Reason, as he thought has banished mysticism and loosened the hold of alleged revelation upon thinking men, while rational illumination now holds the place the discredited, dominant doctrines of christianity formerly held. This is one of his usual overstatements. Professor Hudson states what he felt more truly: "There have been ages of moral conflict, and there have been ages of moral skepticism. This age

¹ Thompson, "Introduction to Science," p. 165.

is both. Practically men are resolutely fighting for a multitude of ideals, so there is moral conflict; theoretically, they are in great doubt, and there is moral skepticism." ¹ Moral confidence may have waned; moral faith may have turned to doubt; but there is one faith we have not lost amid the wreck of things,—our faith in modern science. The dominant doctrines of christianity are by no means discredited; yet there is at present a manifest looking toward science for the way out of moral conflict and skepticism. How could science refuse to pay heed to this call?

Our present faith in science is built upon tangible facts. Empedocles in an hour of inspiration wrote: "And thou shalt learn all the drugs that are the defense against ills and old age, since for thee alone shall I accomplish all this. Thou shalt arrest the violence of the weariless winds that arise and sweep the earth laying waste the cornfields with their breath; and again when thou so desirest thou shalt cause for men a seasonable drought after the dark rains; and again after the summer drought thou shalt produce the rains that feed the trees as they pour down from the sky. Thou shalt bring back from Hades the life of a dead man." If mankind has not literally accomplished all these things, we have for a certainty developed the spirit which makes the impossible the unthinkable.

Science has given our age power through knowledge so that nature has lost its terrors. There has ensued a new sense of proprietorship in the world. We are more highly civilized because of our increased mastery of the physical world. We are fired with the spirit of conquest, which is

¹ Hudson, "The Truths We Live By," p. 3.

giving us an exalted place among the nations of the world—conquest of the secrets of nature and the potentialities of the human soul. Science has given us a great galaxy of brilliant thinkers and writers. Art, literature, education and even religion in large part have adopted the scientific method and spirit. When therefore science speaks on matters religious and moral why should men not listen? Why, too, should not science speak out?

But is science equipped to take upon itself this task of moral and religious guidance? The affirmative answer was inevitable. The scientific method alone can attain unto truth, hence those trained in the spirit and technique of this method could best discover and reveal religious and moral truth. Theology was dealing very inadequately with the world of nature, the primal source of truth. "Unless man conceives the truth concerning the material facts of the universe and its laws he cannot formulate a correct theology." Science is practically identical with reason and religious faith ought to be rational. Science is general, universal, unbiased, rational, while theology is local, limited, narrow and practical. Orthodox theologians too frequently display an inability to distinguish between the forms of religion and religion itself. They fail to classify the different manifestations of religious belief and life, and different religious communities, in accordance with the stage of direction of their development. The certainty of the deliverances of science is always imposed by an irresistible evidence, hence this note should be heard when religion is the subject-matter. The theory of evolution must logically embrace religion and morality within its universal system and it has a persuasive winsomeness.

The deeper, experimental knowledge of the laws of man's individuality, his social nature, his relations and his environment should yield the secret desired to elevate mankind and mark progress. Science being exact thinking always induces belief in the finality of the conclusion, hence the scientist feels he is better equipped to mediate religious truth than the philosopher or theologian with their traditional mysteriousness. Science begins with origins hence no further knowledge is accessible. Many of the teachings of religion are manifestly erroneous, such as the doctrine of creation. By making authoritative the story of the Flood dogmatic, ecclesiastical authority has held back the study of fossils. In like manner truth is being hindered in other ways. Science has in the past revised many theological teachings. The vocabulary of science, particularly the symbol of organism made the journey into the field of religion easy.

To these reasons was added the one carrying the most weight. Tyndal had early recognized that, if the universality of law be strictly maintained miracles and prayer are impossible. So in like manner others foresaw that if the inherent implications and applications of the laws, principles and teachings of science be brought out into the open a science-theology must ensue. Herein, therefore, is the equipment and the vindication of the right of science "to extend her investigations over everything human and therefore, over so important and mighty a manifestation of man's inmost nature as religion."

It might be urged at this point that a valid distinction is being overlooked, the science of religion versus a religion of science. There is a real distinction here. The

science of religion means the critical, careful, unbiased study of the facts about religion, its expressions in life and history and the phenomenon religion itself. But this is merely a bias toward a certain method of investigation, held to be the best, and should be the method followed by every investigator, scientist or theologian. In this manner the facts concerning religion may be assembled and systematic thinking undertaken. The religion of science on the other hand concerns itself with the metaphysics, the beliefs, the laws, the principles and teachings of science and the science-theologian. Moving from these bases the man of science formulates his religious beliefs and his moral code. It is worthy of note that when a science of religion is undertaken the line of procedure is not the scientific one but the dogmatic. The concept of development and a certain definition of religion form the starting point whence a religion of science is deduced.

This objection is answered, however, not by argument only but by definite fact. Professor Conklin makes it very clear that the religion of science is a present concrete fact. He brings the argument of this work to a close with these words: "Can this religion of science and evolution be incorporated in the organized religions of the civilized world?" This religion of science—and evolution—he has definitely outlined. It now exists. What is to be done about it?

Thus the vision of Haeckel has become a concrete reality. When he made the venture at definition of this new religion as Truth, Beauty, Goodness, he declared that all men of

^{1 &}quot;The Direction of Human Evolution," Conklin, p. 242.

science down in their hearts believed as he did, and if they but had the courage they would follow him into the open. For good reasons the majority of scientists refused to take this course. Professors Crampton and Conklin have found the courage.

The issue then to-day between religion and science is this concrete religion of science. The fact, however, of the appearance of a new ism does not necessarily constitute an issue. We live in a real democracy and every man may think and worship "under his own vine and fig tree." The issue appears in the relations established or claimed. The adherents of this new religion make rather extravagant claims for it, which not only invite but demand consideration.

These claims are that this religion is rational whereas orthodoxy is based on emotion. Intellectuality is not wholly denied to traditional religion because emotions and desires have an intellectual component, but this intellectuality is not reason. The latter is of a higher order and falls wholly within the domain of science. This science-religion also gives a rational solution of the problem of evil. It gives a more qualitative attitude of mind toward "the fundamental problems of existence, such as the origin and government of the universe, the constitution and order of nature, the origin and character of man and of society, and especially the mysteries of human life and death, of good and evil, of instincts, emotions, intelligence and consciousness, as well as the aspirations and ideals of individuals and of society."

It is further claimed that supernaturalism is shown to be due to a misunderstanding. The old universe of chance

and caprice has given way to one orderly, stable and settled. The errant belief in miracles and in the completeness and inerrancy of the scriptures is corrected. Dependence upon tradition gives way to rational knowledge. The anthropomorphism of the Bible is labeled and properly shelved alongside such like "ridiculous" ideas. A more rational and sublimer belief in God and creation takes the place of the orthodox ones. The doctrine of divine immanence supplants the ancient transcendentalism. A grander view of man may now prevail. A more sane and modified view of teleology is now to hand. In short the religion of evolution (science) is a religion of progress through struggle and effort. It is a religion of service and sacrifice for the good of others, the real, true christianity.

Such claims as these immediately issue a challenge and constitute an issue. But what precisely is this issue? There are various definitions now being offered. One makes it an issue between naturalism and supernaturalism, but this seems too narrow a statement since there is much more at stake than our attitude toward the physical earth or nature. Another names the idol of the scientific method, but the proponents of the new religion leave this method behind and adopt the rationalistic. Another sees the issue as one between science-philosophy and a truer philosophy with special reference to the concept freedom. The question as to whether the extreme confidence men have in science to-day is justified is still another view.

¹ Conklin.

² Hoernlé, "Studies in Contemporary Metaphysics."

³ Boutroux

⁴ Merz, "Religion and Science."

Much the same view is held by Hudson ¹ when he declares that it must be shown to our generation that science cannot deal at all with morality and religion. The scientific doctrine of naturalism is the storm center according to Balfour and Ward. The necessity of showing that science and religion are not enemies but collaborators is the view of my colleague Professor Patten.

Two quite general views seem to be widely held. The first is that it is necessary to show that science is fallible and productive of un-moralized power and therefore not qualified to take the position of leadership; the second is that the whole system that bears the name of science must be rejected in one lump. The latter is the familiar view, that both science and religion have the right to treat the universe as a whole but the fashion of the treatment in itself decides the issue. The former gets nowhere because the scientist will admit even more shortcomings than his opponents may pile up against him.

There may not be a better way of defining this issue than these distinguished thinkers have given, but it may perhaps be stated in a somewhat different fashion. The issue is the modern religion of science. The concrete fact faces us that there is at present a definite, clearly outlined and rounded-out religion of science. This new ism lays claim to being superior to all other isms of the day and by its most ardent adherents to be the real christianity. It is offered to us for our acceptance and edification. The demand of the hour is the necessity of a critical examination and evaluation of the new ism.

^{1 &}quot;The Truths We Live By."

Such a critical examination naturally excludes all "bad blood," partisanship and bias. Our age is too serious and too much devoted to the quest of truth to allow trivialities a place of any prominence. The science-theologians who support this new religion are honest, serious-minded men. They will accept criticism in the spirit with which it is given. The criticism and evaluation will then be, not primarily of science in general, nor of the fallibility and errors of scientists, but of this definite, concrete religion of science. A concise statement of this new religion must now be made.

CHAPTER TWO

THE RELIGION OF SCIENCE

Many difficulties present themselves at the very outset. It is frequently claimed that the religion of the scientist is not different from the religion of other men. This is true and yet not true. It is a true statement when uttered by one who holds his science tenets as science and his religious beliefs as religion, and believes there is no inconsistency involved. It is likewise true that men of science are not as a rule irreligious or differently religious, in the sense that they have no religion. It is true also in the dogmas and doctrines of orthodox christianity and yet be a religious man.

There is, however, difference between religions. The early Babylonian, with his animistic and polytheistic faith was a religious man, but the quality of his religion can hardly stand comparison with that of christianity. Like God like people, is a truism. What a man believes and worships is what he is. A religion reveals its individuality and peculiarities by its inherent truthfulness and in its product. So there is a difference between the religion of those who accept the religion of science and that of those who belong to some other denomination or fold.

Another difficulty arises in the effort to maintain a right relation between theory and belief. That nature is uniform in her actions and can be depended upon to always

reveal this uniformity is a theory. In the mind of the layman this is an actual belief. Many of our science-theologians take meticulous care to affirm that science considers this law a theory, but on the next page the theory becomes a sufficiently legitimate generalization upon which to build and from which to draw conclusions. In fact it has become a belief. It would be difficult to find a man conversant with the theories of science who does not accept them as beliefs. Moreover those who to-day believe in science do not always know all the theories.

When, therefore, we state certain beliefs as characteristic of the religion of science there is no fundamental error. Professor Perry finds that in general, theories and beliefs have the same fundamental value, since both are forms of knowledge, and it is knowledge that furnishes the illumination and guidance of all conscious action. The religion of science is illumination and guidance, and it would be a difficult task to discern in the use of the theory of the eternal conservation of matter the part played by the belief that this is a theory or by the belief that it is a fact. The majority, however, of the science-theologians seem to have traveled a well-beaten path. They begin with the claim that the man of science holds his theories merely as agents to attain unte further knowledge, then they slip almost insensibly into declaring they hold this theory as proved and therefore it is a belief, and finally they proceed to establish a scientific basis for the belief which was at first a theory.

There is an objection 1 made to the use of the term, religion of science, on the ground that such is impossible,

¹ Thompson, p. 792.

since science and religion are incommensurables. The basis of this objection is the independent nature of each of these. "Science discovers general laws, formulates sequences, and describes things as they are and as they have been; while religion is on the far side of intellectual curiosity." The latter transcends the ordinary and implies a certain exaltation of feeling. Science is reason, religion is emotion, therefore they do not move in the same plane or speak the same language.

This contention is another of those gratuitous problems created by definition. If science and religion are so defined as to make them incommensurables, then for the problem-maker they will be. The author, however, of this objection immediately denies himself and repudiates his definitions. He declares first that the growth of science influences religion—the wall of separation grows thin. Then nature, the universal mother appeals to the emotions—reason and religion get closer together. Finally scientific convictions cannot be kept unrelated to religious convictions—the chasm is bridged.

Still another difficulty is met in the fact that the learned doctors do not always agree. This fact has been sufficiently aired to need no further proof. The answers of the scientists seem usually well given. It would be surprising if there were literal agreement—it would be worse than surprising because it would reveal the form of the religious close-corporation. There is, however, substantial agreement in fundamental laws, principles and canons. More room will therefore be given to these fundamentals than to the teachings, although it is the latter which figure the more prominently in the popular discussions.

The form of the statement of the religion, here given, which is borrowed from that of Church Manuals, Disciplines or Catechisms may not be considered apropos; but it is a convenient one—and we think really quite fitting.

Since religion is both external and internal it will be convenient to follow this distinction, taking up the internal side first. Internally, religion is the consciousness of and response to the Other World of supernatural, absolute values; or anticipated attainment of eternal values; or enrichment of life through relationship to a more-than-human environment. The external manifestations are three-fold: beliefs, creeds, canons, dogmas, teaching, theology and usually a sacred literature; ritual, forms of worship, institutions; conduct or morality. The religion under discussion lacks but the second of these three. The reason is that it is mainly an intellectual religion.

A. THE INTERNAL EXPRESSION

The basal fact is that the scientist worships truth. His search is above everything else for truth. Truth is the very breath he breathes. His findings, his beliefs must therefore be truth. He is the willing, loyal servant of this master before whom he bows down as to one greater than himself. As science-theologian he feels that he has discovered the truth about religion and thus religious truth. Is he not therefore religious because his spirit is truth and does he not worship that which is the core of religion? Then as a worshiper he feels the missionary call to spread his truth before all mankind.

He worships also Beauty and Goodness. In nature he

finds these great objects of commanding interest. Rightness perhaps is a better term for him to use than goodness, but the meaning is fundamentally the same. When a man really sees the "cosmic drift of things" he becomes serious and reverent and a deep emotion visits him,—an esthetic or religious one. Whoever loves the True, the Beautiful and the Good is religious.

He worships the Eternal in the quasi-personalized, eternally-developing, civilized world, or eternal humanity. Helmholtz well expresses this: "As the highest motive influencing my work . . . was the thought of the civilized world as a constantly developing and living whole, whose life, in comparison with that of the individual appears as eternal. In the service of this eternal humanity my contribution to knowledge . . . appeared in the light of a holy service."

He attains unto a oneness with cosmic processes. "I and the cosmic processes are one."

He attains unto an enrichment of life through rational relationship to a more-than-human environment. The man who sees clearly the workings of this universe will be optimistic and elated.

His religion is personal. Each man stands or falls dependent upon the quality of his ultimate attitude to the universe, and his attitude toward the fundamental problems of existence.

Among the science-theologians may be found some who profess belief in God. The argument is advanced that science proper does not deal with a First Cause, hence the scientist can believe in God as the First Cause. Some, like Bonney, hold their science and religion in separate

apartments, hence profess themselves sincere believers. Others define this fundamental belief as an emotion and will agree that if you have the emotion you may have the belief. Others define God as immanent in the natural world, hence profess the belief. It is our contention that these efforts to save the belief in God not only do not accomplish the desired result, but, further than this, God does not logically find a place in this religion.

B. EXTERNAL EXPRESSION

I. The Religion of science does not find external expression in an organized church, in ritualistic practices or in any institution. The devotee of this faith usually expresses his religious life outside of the church.

The reasons for this individualistic temper are apparent. This religion is mainly intellectual and therefore expresses itself more logically in beliefs and teachings. It emphasizes morality which needs not an organized institution. Scientists moreover are truthseekers and not sectarians. They are missionaries of Truth and the best work can be done through teaching and exposing the gospel of science. Truth, beauty and goodness are best known and discovered in nature, hence the best place to worship is in the great Out-of-Doors. Moreover, a universal religion would suffer by becoming sectarian.

For these reasons the distinction is clearly made to-day between the true men of science and the science-theologians. It is the latter only who ever speak of a religion of science.

II. Conduct or Morality.

The outflowing of the inner religious thinking will be seen in a character true and worthy. This moral character will be both individual and social.

The all-controlling regard for veracity and the disciplining in precision and balance ought ipso facto produce a truly noble character. For where passion joins hands with courageous work the result is practically certain to be worthy character.

The scientific mood and method should produce a balanced character. The fundamental virtues issuing from this temper are clearness, precision, impartiality, caution, courage and coöperation. These are fundamental life virtues.

The main issue of moral character is society made more moral. Conversely a true, moral, social order can appear only as the product of the scientific "veracity of thought and action." Men must be moral enough to shew the truth, "to strip off the garment of makebelieve by which pious hands have hidden its uglier features."

The scientist naturally has the truest conception of moral conduct since this is based upon rationality and the fundamental natural laws, principles and truth. It is an error to think that true morality is grounded in a categorical imperative, a traditional faith or an inspired authority. Duty rests upon the solid basis of social instinct—the natural ground.

Moral laws are therefore natural laws. Nature when properly studied reveals the real, fundamental principles for moral instruction and guidance. There are therefore no absolute standards, no a priori, ideal, ethical principles or conscience. Whatever public opinion requires is his-

torically moral for it. The Golden Rule is true because it can be demonstrated empirically. Nature reveals the truth that moral laws are developed instincts for the preservation of life.

Righteousness is that state of social and individual relationship in which the material welfare of each and all is best promoted. Service, and even the sacrifice of the individual for the good of the species or humanity is the highest conception and expression of a right action.

Altruism is a product of evolution having arisen by the road of energy, the nervous system and speech, and it exists to serve high, natural, social ends beyond the individual. It is a fiction to think of an idealistic urge fathered in the "beyond nature" which creates through human will power a higher moral life. Will power is, in the more crass explanations, "the movement of atoms in the brain," but in the more refined it is freedom within bounded limits.

The christian care for the weak is not altogether in accord with the ways of nature. The judgment in this matter needs careful scrutiny. Eugenics would be a step in the right direction. It is moral to use natural facts and laws for human progress.

Civilization is the product of the transmission of variants and constants in evolution. It is error to think of it as the product of ideals, visions or moral conflict arising out of religious inspiration. Reason cannot improve civilization since it too is the product of evolution, unless it is seen that there was a purpose in the evolution of reason for its own progressive purposes. Commiseration with the

conditions of savagery are therefore wasted because such conditions are perfectly compatible (adapted) with the mental and physical development. Perhaps savagery contains as few, proportionate necessary evils as does our civilization.

The outstanding moral virtues attendant upon this religion of science are then: truthfulness, honesty, courage, service, the sacrificial spirit, coöperation.

III. The Theology, Sacred Bible, Creeds, Canons, Dogmas, Teachings.

1. The Sacred Book is Nature.

Nature or the physical and material universe is the fundamental reality. It is independent, self-existent, eternal, self-moving, creative. Nature is the sum of all phenomena and the relations existing between or among the component phenomena. Nature existed prior to all present developments, including man and consciousness. There is no sense in which we create the world. Nature will exist when man has passed and the hills have been removed. Our knowledge is of phenomena, the properties of individual phenomena, but the existence behind must be assumed else science and thinking are impossible. Though this existence is assumed, "given," yet its properties are mass, weight, extension, gravitation and inertia. The original form was doubtless "infinite nebulæ" or "atoms, each consisting of a spherical nucleus of positive electrification and groups of corpuscles" or as God-Substance.

Nature has four dimensions: length, breadth, depth, duration. Her main qualities are: stability, continuity,

eternity of processes. Natural law knows "neither variableness nor shadow that is cast by turning." Nature's revelations are eternal truth.

Nature is the universal mother of all that is. From her, by natural processes has come all that is and will be—including all we know, religion and morality. When therefore we would seek inspired truth here and here only is the source.

Knowledge gained from the study of nature is inspired knowledge. Nature herself gives the man whom she has evolved (created) knowledge, by direct awareness or immediacy. She gives to man a certain freedom to think within determined limits, but his thinking will be truth only when it corresponds to her laws and ways of doing. Nature did not receive this knowledge by any process of inwriting or of being written upon by any external Power. She is self-revelatory. Her inspiration is not a delegated one but is primary. She cannot lie because she herself is the Real and therefore Truth. She does not and needs not to appeal to any outside authority for verification since she is Truth and the verifier of all that is true.

The revelation from inspired nature comes to man primarily through the senses and not by any a priori method. We just come to know. Nature when she evolved (created) man created his sense organs and fitted these to receive sensations or perceptions—knowledge. Even knowledge of relations is given directly. We, that is consciousness, do not supply the form of knowledge. General ideas are given general. Time and Space are given directly. In course of time there arises the ability for experimentation and study and then advanced knowledge

ensues. Advanced knowledge is not different in kind but in degree. Sense-perceptions and reasoned convictions are fundamentally one, being but different stages in the process of evolution. When we predicate the existence of something which must be the cause of our sensations and then call this something Reality, this judgment is the product of nature, hence truth. Thus it is that even if in a roundabout way, yet it is by a sure process that nature reveals herself to man as fundamental Reality. Our part in the knowing process is by observation and experiment to expose ourselves to nature and she will do the rest. Then, to the properly exposed mind will be revealed such truths as the uniformity of nature, the eternity of matter and the other scientific fundamentals.

The proof of this inspiration (though of course none is necessary) is found in the fact that there is but one test of truth—being true to nature. Scientific laws, being natural laws are therefore inspired. If, however, any of the revealed laws were ever to be changed this would not prove their falsity. Such a change could only come about by nature revealing some new phenomenon which the law was not large enough to contain or explain. This new phenomenon would then be absorbed by nature into a new law, one nearer to final truth. There can thus be in science no real error: there may be limited revelation.

2. The Canons.

Matter is eternally conserved.

In the midst of its mutability, matter, the substance of the natural universe, is eternally constant and conserved. It is not exactly the sum of the composite physical objects we know, but our knowledge is of that of which they par-

take. It is that which is common to them all. Matter is mutable but not indestructible.

Energy is eternally conserved.

The total amount of energy will remain constant, the potential being balanced by the kinetic and vice versa.

The world of nature is best conceived of as a great mechanism—a mechanical organism.

This symbol is used to express the fact that the universe is a more or less unitary whole made up of interconnected parts. The relations between these parts suffice to explain all movements and excuses any aid from an external agency. Governance and movement are from within, the result of the action of one part on the other. The different parts of nature do their work, not by any choice of their own or because they are seeking to realize any preconceived end of their own or of the mechanism. They act under the determining power of the circumstances of the moment. They act from a push rather than a pull. Results are due to no rational choice but "to the form of the combination of the parts and their adjustment each to the other."

All nature is under the Reign of Law.

Natural agents, factors, and elements possess a characteristically constant way of behaving. They can be relied upon to act in these ways (under proper conditions) both in the present and in the future. Succinct description of fixed forms of functioning is a law.

3. The Creeds.

I believe in the uniformity of nature.

Nature is absolutely and consistently uniform in all her activities and because of this, whatsoever is observed to occur to-day will under precisely similar conditions occur

again. Due to this fact universal knowledge and exact science are possible.

I believe in Reason as the sole source of true knowledge. Reason unaided by anything supernatural can attain unto truth.

I believe in the rationality of the universe.

Every and all processes of nature are potentially comprehensible by the human mind. The world we come to know is an orderly one and so fixed in its types of processes that these can be completely and accurately described under natural laws and hence, future occurrences can be successfully predicated even to the minutest detail. Thus science and reason may be considered interchangeable terms.

I believe in the objective reality of the physical world. The objects making up the physical world may be treated as independent existences.

I believe in the objective reality of Time and Space. Since all material things have extension it means that they exist in space. To treat therefore of things existing in space is to treat space as though it too has objective reality.

Every event takes place in time. If the objects of these events together with their behavior are to be treated as actual there seems to be no reason for treating otherwise the time periods in which the behavior occurs.

I believe in Evolution.

The present is the legitimate child of the past and will be the legitimate mother of the future. Science thus completes itself in history.

I believe in the scientific method.

This is the only method of attaining unto Truth.

4. The Theology.

A rational religion is the highest type.

Religion is a tremendous force in human life because its appeal is to the noblest emotions in human nature and the world is governed more by emotion than by thought. The emotions it appeals to and cultivates are the love of truth, beauty and goodness. But there are forces which battle against these noble emotions, such as hate, selfishness and passion. The function of religion is to give mankind relief from these "Fightings within and fears without," and thus to minister to human comfort and happiness. For the mass of mankind this feeling of harmony, this inner peace comes only through religion; but, "The most intelligent types of men may find it in science." If one has the emotion which is religion, well and good; but if he has science he can get along without it. Thus science may become religion and in fact the truer harmony with the superhuman powers and processes comes through science or reason. The highest type of religion is therefore the rational one.

Religion is the product of evolution having arisen in and developed with the emotions. The emotion which may be named as the most probable one, out of which religion emerged is fear. The evolution of "emotions and religions" has been a slow process since both emotion and religion are static. The evolution is therefore more marked in the direction of quality, the present rational type being the highest.

This refers to the spirit of religion. When the spirit works towards uniformity of belief rather than of aim it

remains static. When, however, such an aim as a life of service characterizes the spirit we have truer religion—the religion of science.

God is a term which symbolizes that which faith finds beyond where science ends. He is not the absolute. He does not properly belong to scientific investigation or teachings because the organs of science are observation, experiment and reason. Science therefore finds no God, and, without speaking irreverently has little use for this symbol or hypothesis.

However, the scientist may also have faith—follow his emotions. Since science does not deal with a first cause, the scientist is free to believe if he wishes.

5. Creation.

The doctrine of the eternal conservation of matter logically settles the question of creation. That which is eternal had no beginning. The beginning of the beginning cannot be known. The claim according to which science finds that every event is due to preëxisting natural causes—the chain of cause and effect extending back ad infinitum—also excludes any further discussion concerning the creation of the world and man.

However, some science-theologians hesitate to draw these logical conclusions and fall back on the illogical statement that the trip backwards ad infinitum may end in a first cause or an uncaused cause.

The main science teaching then is that God certainly did not create this world out of nothing. The supernaturalistic conception of God and his creative act cannot be accepted.

Man came into existence in the course of evolution by

natural processes and not as a special direct creation. The first man was made as the last one was or will be. Creation may be seen each moment in the changes of progressive evolution.

The soul is the moral and emotional part of man's nature as contrasted with his mind or intellect. It is not an independent entity of immortal worth, something which survives death and is immortal.

Some define it as "an abstract generalization gathered from passing mental states."

Man is a higher animal of the order of primates, closely related to the chimpanzee but with a higher degree of mentality. He is secondary in time and enduring value to nature. He is organically related to the animal world and through this to the whole physical universe with which also his destiny is bound up.

Freedom is limited. We have equal power at any given moment to do one thing rather than another, yet this freedom is limited and prescribed. Those who hold to universal causation and necessity in a mechanical universe find our thinking we are free an illusion. If we had perfect knowledge we could predict every human action now and in the future.

6. Immortality.

There is an immortality or survival after death of all bodily elements. This with the perpetuation of the race constitute an immortality which is natural. Nature only is immortal.

7. Evolution.

Since science completes itself in theory, evolution sums up and epitomizes the theology or teachings.

Evolution teaches:

That man has not been recently and miraculously created, nor does he stand apart from the rest of nature in solitary grandeur. Man, body, mind and the "society of man" are the products of evolution—"from Amæba to man."

The truth of what mankind shall be.

That there are two sorts of inheritance: our bodily qualities and mental capacities—and our social inheritance of language, property, customs, laws, institutions.

That progress is "from the simplest to the most complex organisms." Progress has come to an end in the individual but not in society.

That human intellect is but a higher form of that which exists in all organisms. That which we call intelligence, reason, will, in man is instinct, emotion or associative memory in the lower animals.

That environment plays a large part in human development.

That human betterment can come by raising the standards of heredity, of education and of social ideals rather than standards of living.

That the christian sentiment which works toward the preservation of the less fit is an error.

That the christian ideal of the unlimited, progressive development of man, "till we see Him and be like Him," is an error, because in every line a limit is sooner or later reached beyond which it is not possible to go. Individual perfection comes in other than individual lines, that is, social. It is probable that the limits of intellectual evolu-

tion have been reached in the greatest minds of the race. "The intellectual evolution of the individual has virtually come to an end but the intellectual evolution of groups of individuals is only at its beginning." It is only the race that survives.

That coöperation is the one and only true way to human advancement. This will function productively when we attain unto the rational organization of society.

That no other animal greatly superior to man will ever appear on this planet.

That the hope of mankind lies through an organized society. Instincts must be balanced and controlled by reason.

That the uncompromising principles and teachings of christianity are erroneous because life and all of its activities consist in compromise.

That the doctrine of the brotherhood of man with its note of equality and individual liberty is untrue because nature has made men unequal in every respect. Equal freedom for all men to become "perfect even as He is perfect" is impossible because of the law of organization. The very nature of organization is specialization and cooperation which implies inequalities and limitations. Organization limits individual freedom and subordinates the individual to society. Lack of organization spells defeat.

That the doctrine of individual salvation, the free choice of any individual of an end of life conceived of as eternal, leads men astray. The supreme good is race preservation and evolution. The man who seeks to save his soul certainly will lose it. Each individual has but one true choice

in life, and that is to subordinate his personal salvation to that of race preservation. There is no personal immortality.

That the problem of evil can be solved. The solution is not the christian one of overcoming evil with good until it disappears. The answer is a rational religion which will establish harmony with our environment and thus remove the consciousness of conflict. Struggle, suffering, death is the solution.

That religion can be rational, that is, scientific. One can have a faith which will satisfy the reason as well as the emotions.

That a man of science can believe in God.

There is a special God or conception of God given by evolution—a sublime conception. It is that God is immanent.

That the idea of the supernatural is due to a misunderstanding. Nature is everything that is.

That the mechanistic interpretation of the universe has great values.

That miracles, such as those recorded in the Bible are impossible because of the stability of natural law.

That the theory of the inspiration and inerrancy of the Bible is false because of its dependence upon the supernatural.

That God did not preëxist and at a definite point in time create this physical universe.

That evolution is not atheistic.

That the christian doctrine of Providence is false.

Evolution gives the world a grander view of man. He is the climax of the vast ages of evolution.

That evolution modifies the doctrine of Design in creation and in the world. There is purpose in the organic universe,—it is not all chance. Evolution leads somewhere.

That the Fall of man has been upwards and not down. We fall when we know the better and do the worse.

That all religious and moral progress is through struggle. There is no possible heaven devoid of struggle. The hope of mankind "to be at peace forever" is a dream. Continued existence depends upon rational struggle.

That the doctrine of predetermined salvation which will come to a man whether he struggles or not is false.

That salvation by faith alone is an impossibility—if it be faith without works.

That we are master of our destiny to a large extent on this planet.

That the religion of evolution is the true christian religion because it teaches sacrifice, struggle, service, cooperation. Evolution leads to a higher intellectual, ethical and spiritual life.

That true religion deals with this world rather than the next. It seeks to build here the City of God. It looks forward to ages of greater justice and peace and altruism.

That the goal to the future lies along the way of improving the ideals of society and by breeding a better race of men.

CHAPTER THREE

THE CANONS-MATTER, ENERGY, MECHANISM

THERE are two judgments which must be made in order to fairly evaluate a new offering such as this new religion. The one relates to values per se, and may be made independent of any reference to the foundations upon which the object or belief rests or to the method followed in reaching the conclusions. Alchemists in the Middle Ages thought they had a mixture which would prove to be gold, but it turned out to be porcelain. Porcelain, however, independent of its chance discovery is a very valuable gift to mankind. This judgment, however, has certain limitations. It is true from the pragmatic viewpoint that if something is presented as truth which does not make a winning appeal to our judgment, or, if worse than this, there is left a dubious or depressing impression upon us, this reaction naturally raises a serious question as to the truthfulness of the truth. Truth should elate us and at least win some deepseated favorable reaction. However, this reaction for or against does not absolutely settle the matter at once.

The other judgment relates to the foundations or reasons which support the conclusions and the validity of the method used. If these supports cannot stand the test of critical examination and evaluation, then the whole building falls to the ground or it must be re-founded. And

even if the supports are found sound and secure the critical evaluating is a necessary and important task.

As stated earlier there are practically two types to-day calling themselves scientists: the "pure" scientist and the variant. This latter is the man of science who wishes to act in the dual capacity of scientist and theologian. He thinks that the scientist has the right to enter other fields, he is prepared to do so, and that science is the only hope for the world to-day. He further feels that necessity is laid upon him to do this special work of revealing to mankind the truth science can give.

The one particular form this "call" has taken is the task of drawing the inferences implicit in the conclusions of science. The distinction between theory and belief is neglected. These conclusions and inferences by their own inherent character and universality extend to and embrace religion and morality. The "pure" scientist feels no such call, but to some of these intellectualists has come the self-conviction: Woe! is me, if I preach not as well as conduct scientific research.

The question then before us is: What is the character of these conclusions of science out of which such far-reaching inferences come? What is the validity of the inferences?

The law of the eternal conservation of matter is one of the fundamental conclusions. To the "pure" scientist this is a workable hypothesis only, but to the science-theologian it is an unquestioned belief. The latter is sometimes outand-out dogmatic and asserts that there can be no doubt entertained concerning the finality of the truth of the law, while at other times he modestly asserts his private belief concerning this finality and disclaims any intention of try-

ing to force it upon others. But he then forgets his modesty and upon a hypothesis desired into a belief he rears a most astounding structure of religious thinking and creates models for religious living.

What now is this so-called law or hypothesis? It is the theory that in the universe there is constant change, but there is no diminution or increase either in mass or quantity. The quantity of matter is eternally conserved. Matter and space are identical as to continuity but "matter as a form of indivisible and discrete atoms is different in kind from space." Carefully conducted experiments within controlled limits, such as the burning of a substance inspired this generalization. Then it became a belief.

Now there is no disposition to question the accuracy of the experiment of the physicist upon which this generalization is based. There are, however, some observations which can legitimately be made.

First of all the experiment is an empirical one and therefore in the nature of the case can never inspire any conclusion which may be termed general or absolute. In all such experimentation results are approximate only and can never be anything else. For there is nothing absolute either in weighing, measuring or judging. Measured results are always relative. An empirical standard must be arbitrarily determined upon and judgments made as nearly or approximately accurate as empirical judgments can be. Nature furnishes no units that are constant. One ten-millionth of variation could disprove the whole certainty of knowledge. Repetition of phenomena must not be confused with law.

Then only a very limited number of experiments can

be made where the quantity before the change can be accurately determined, and then the identical quantity identified and weighed quantitatively after the change. It is no observation of a man "not in his senses" to note that the universe never can be measured or weighed. It is necessary to drive home the truth, that neither the universe nor even the smallest fraction thereof can ever be reduced to experimentation to keep some thinkers within the bounds of sense when they attempt to base stupendous conclusions upon insufficient data.

The experiment upon which this huge generalization is based is always an ideal one. The conditions are controlled. Change is supposedly arrested for the time being until it is initiated and concluded in the controlled experiment. No experiment has ever been made, in situ, and never can be, whereby the quantity is measured and weighed, the identity as to quantity preserved through the change and the exact quantity again experimentally determined. A bit of phosphorus thrown on water disappears. Who would ever think of this law of eternal conservation being experimentally used or illustrated in such a case? Only a very few, an infinitesimal number of such empirical experiments can ever be even ideal ones. To follow with quantitative measurement the passage of a vegetable through the process of decay would be surely an ideal experiment. To conduct an ideal experiment moreover is, in the nature of the case, to disqualify the application of the conclusion to free nature.

Then again the central fact of change is not given adequate consideration. This fact makes all physical experimentation not only approximate but exceedingly tentative.

No man can control constant change—he himself least of all. Here is where abstraction even for scientific purposes is absolutely impossible. This is why the true scientist is always very humble in his use of theories and generalizations.

It must be noted also, that there are scientists to-day who say that degeneracy actually disproves this theory of conservation. It is not surprising that such a conclusion would be reached; for is there any experimental proof that when a material substance passes from sense knowledge by the way of acids or gases it is not gone for good? There is no proof—only a belief.

There is further indirect proof that scientific thinkers themselves are conscious of these facts. Since Descartes' time, particularly, this matter which is conserved is not the physical phenomena known to the senses but either the mass of atoms or a substance behind the phenomena. Scientific, hypothetical theory has followed theory, the subject-matter ranging from inertia to ether. Hence that which abides is not the matter of physics but of metaphysics. Professor More notes that "a metaphysical hypothesis (such as matter really is) valuable solely for its utility is always dangerous; for by constant use we tend inevitably to give an objective reality to things which in the beginning we knew to exist only in our own minds."

This is just the tendency noted in the promoters of the religion of science. The difference between hypothesis and fact, between metaphysics and physics, between the creations of nature and the creations of the imagination is not only slurred over but forgotten. The fact is, that since the metaphysical matter or substance, "the existence be-

hind the phenomena" is the real, then the existence of sensible bodies becomes the unreal. This virtually denies the validity of the experiments of the physicists upon which presumably the law is based. It makes the law of conservation in reality a faith, for no scientific experiment can ever reach this reality which is supposed to be eternal. Is this not the desire or will to believe?

Then further still, since there naturally arises suspicion concerning the validity of this faith, this whole unseen but presupposed reality is conceived of as a mechanical system that can be mathematically orientated. The basis of the faith then resolves itself into the certainty of mathematics. This is surely getting a long ways from sensible phenomena.

What then is the certainty of this law of conservation? But, specially, what is the value of the conclusion, when used illegally as a fact, from which inferences are drawn concerning our conception of and our relation to God? For the inference is logical, that if matter, which is used by jugglery in the two senses of objective phenomena and metaphysical substance is eternal, then there cannot be two eternals or absolutes in one universe. The absolute God must disappear and in his place some other explanation be fabricated.

The value of the conclusion for the pure scientist is manifest. Within the limits of his field, where the experiment is an ideal one and all other factors are neglected he may experiment and make use of theories. But as a conclusion whence inferences may be drawn the law of the conservation of matter cannot fairly, scientifically or rationally be used.

The law of the conservation of energy is another of the fruitful conclusions whence items of theology are inferred. Historically the idea of energy arose out of the contemplation of the observed fact of change. It is the answer to the question of, who or what is the efficient agent producing the observed change. Observations made in the case of coal, for example, show an energy with the capacity to produce certain effects. It is also observed that there are two kinds of energy: kinetic or moving and potential or reserved. Upon such observations then has been built up this theory of the conservation of energy which is that "the total amount of energy will remain constant, the potential energy lost being balanced by the kinetic energy developed, and vice versa." This law like all others when stated by the pure scientist means that this is probably true and will hold within any "closed dynamic system," the universe as a whole, could it be compassed, being the ideal one.

But a change occurs when the science-theologian comes to use the law. Limitations are lost sight of and the metaphysical character of the theory is confused with the experimental. It is a conclusion ready for use—at least it is a sufficiently legal generalization. Thereupon is then built theological beliefs concerning the Supreme Power or moving Force in the universe.

It must be very evident at once that this procedure lacks the main quality it ought to possess, which is rationality. There is nothing irrational in the use of the theory by the pure scientist, because it is perfectly legal, when there is no definite evidence either way, for the imagination to frame such a theory. But to go beyond this is surely stretching the ordinary meaning of rationality.

For the theory never has been proved, it never can be, and every scientist knows full well that his evidence at best merely forms a reasonable basis for a theory. No one can demonstrate—in fact such is an absolute impossibility—that no energy is ever lost. The whole idea moreover is metaphysical and not experimental, hence no certainty for science. It has been further pointed out that the conception of the universe as a whole, that is, as a "complete, selfcontained, externally unaffected, physical unit" is a biased and unworkable assumption. To use this assumption is to argue in a circle.

There is a new phenomenon now which seems from the side of science itself to disprove the law. It is, that in radio-activity there seem to be cases of actual degeneration of matter, cases in which part of the material substance passes off in the form of energy and ceases to be matter. Cooley then concludes, "If such is actually the case, the total amount of matter has been lessened and the total amount of energy increased, and neither matter nor energy is rigidly conserved." Such a fact as this drives the scientific theorist into such claims as that matter and energy are one. If this be true, then the claim that matter is conserved is still further weakened.

Other considerations add weight to this judgment of irrationality. Is not the backbone of the whole law the belief that this universe is uncreated and is eternal? Is this not the real reason for valuing and using the conclusion? What relation is there between energy and action on one hand and energy and a moving Power, who might be personal, on the other? What right has any one to practically identify physical energy with the creating and sus-

taining power of a supreme Being or this Being himself? Is it not that just here men make the choice between a faith in nature and in abstract continuity and on the other hand faith in a personal, omnipotent God? The only mover, we know of from experience, with capacity for producing change is ourselves, that is, a human one. On the basis of this fact the inference is a rational one which calls for faith in the Supreme Mover. For if inertia be the real stuff of the universe then to speak of this as being endowed both with its own character and the opposite, action, is a contradiction in terms. To speak of matter and energy then as really one is to make confusion worse confounded.

This law then has much less to commend itself as a conclusion approaching fact than the conservation of matter. What a shadowy foundation upon which to essay teaching concerning the Prime Mover in the universe! What an excellent illustration of the personification of an abstraction! And then it is treated as a fact whence inferences may be drawn!

When with some impatience the reply is made that every one in his senses knows these things, the answer must be again returned, that if they are known, then why is not the knowledge honored? Why go ahead and use such metaphysical theories as even approximate facts? Why assume the fact and then create a theory of evolution wherein the Prime Mover or God becomes a secondary, evolved object of the emotions? It should be definitely stated that since this all-comprehensive theory demands that these two laws be facts, the devotees of the theory are using them as facts.

The third conclusion which serves as a foundation for

our scientific thinkers is the mechanical theory of the universe. The use of this assumption has been on the increase since Huxley made serious use of the mechanical analogy. The theory, as defined in science, says that nature is a "more or less unitary whole made up of interconnected parts, a whole in which all the movements are determined and explainable by relations between the parts, not through some outside agency." Explicitly stated, it says that nature or the physical universe is governed from within; motion comes from the action of one part upon another; the parts work together without any choice on their part of the ends served by the mechanism as a whole; and each part does what its nature under the circumstances leads it to do-automatic action. The blood circulates, the stomach digests, the gas explodes, not under the direction of some intelligent agent but each organ or part of the machine performs its part as do likewise the several parts in unity. In the case of the human body it is chemical action and not personal direction which initiates and carries through the natural processes.

To the physicist this analogy is just what it is, an application to the physical world of likeness to a product of human hands. It is useful when not made to go on all fours. Since all the experiments made are ideal and controlled ones, the tracing of cause and effect may be mechanically and in abstraction described. But to the metaphysical scientist the limitations again are lost sight of. Proceeding from the basis of belief in the conservation of matter and energy—both metaphysical imaginations—the thinking process leads logically to the literal and complete application of the mechanical analogy. The main ideas

associated with matter and energy, such as uniform activity, continuity, interaction, self-adjustment and causation can then be retained and brought more into prominence through the application of this analogy to the physical universe. This new relation, however, of matter, energy, mechanism, soon passes from theory and analogy into belief and fact.

Then occurs the further step, with which we are now familiar, when we observe the ideas and theories of the pure scientist being used by the science-theologian. To the former cause and causation are thought of in relation to mechanism. It is mechanical causation, the concrete sequener and organic proximity of cause and effect. If a tree falls there is an immediate interacting cause equal to the effect. Hence the modern attitude even in matters social and moral to seek for the tangible, mechanically related cause. But when true to his thinking the scientist never confuses this mechanical with personal causation. This opportunity is left to the science-theologian.

Crampton declares: "Whatever definition we may employ for a machine or an engine, we cannot exclude the living organism from its scope. . . . Our analysis reveals the living creature in an entirely new light, not only as a machinelike structure . . . but . . . structure and function are inseparable. . . . A living individual is a mechanism. . . . As far as the evidence goes it tells strongly and invariably in favor of the mechanistic interpretation." So Conklin: "Science reveals nature as a vast mechanism." Thus the living organism, including the

^{1 &}quot;The Doctrine of Evolution," pp. 14, 20, 27, 30.

living personality is engulfed within the mechanism. The fact that we act, that we act from motives, and shape our acts by our own idea of the end sought, is doubtless self-deception as far as any free action is concerned. This reasoning would institute an inquiry into environmental, chemical and inherited causes, and usually ends with the feeling that such have been found.

In anticipation of a critical examination of this line of thinking it has been urged that of course we have not yet full knowledge, so the theory as completed cannot be criticized; but as far as investigation has gone this interpretation of nature including man as a mechanism or mechanical organism works.

As far as the analogy may be applied is the pith of the whole matter. It must be remembered that this view or knowledge was not given direct by nature but is an analogy applied to the physical universe. The method employed in the thinking is what is well known in religious studies as the prooftext. The conclusion that nature is a mechanism is assumed and then excursions are made into nature for the proofs. The proof naturally cannot be secured by the experimental method, because all that is observed, or even demonstrated by experiment is contiguity and not causation. By carefully prepared observations and experiments certain sequences can be noted; but the jump from this observation to the statement that causation is mechanical or at least practically so is a tremendous leap. It is the leap from a description, applicable to a few individual cases to application to the whole universe. That there is a mechanical phase of the universe physics makes good use of, and by so doing has put tools of inestimable value

into the hands of men. But this is not the whole of the universe.

Since there are those who, while professing knowledge of the limitations both of the theory and of knowledge in general, yet persist in ignoring the weight of these limitations, and draw portentious inferences from facts, far beyond "as far as they ought to go," it is necessary to point out some facts relative to the analogy between the universe and a machine.

A machine is never alive in any legitimate use of this Motion is not necessarily life; it is only life that can produce motion. To speak of a mechanical organism is a flat contradiction in terms. In a machine the parts act and react only when in actual contact and in right rela-The analogy between the human body and an engine may bring out many likenesses but the stomach does not digest food in the field—at a distance. The food is introduced into it. In a machine a gap means the end of its working. A machine is built, assembled, set in order and it works just as long as it is forced to from without. It is not self-starting, self-propelling or self-sustaining. It wears out and needs constant care and attention with frequent repair. The body on a car is no part of the mechanism yet a valuable part of the whole. To get a machine into action there must be established and maintained a definite sequence of actions all working towards the one end. A machine obeys the will of the builder or manipulator and does nothing of its own accord or with a motive. The ship's mechanism will run it into an iceberg or to Liverpool—it will run on irrespective of the end until it stops. Uniformity of action in a machine depends wholly

upon the skill of the mechanician. A machine merely running is nothing but waste. It can be reversed but not so with life. There is no backward turning to life. A machine exists only so long as it functions in achieving the end for which it was designed. How many of these points can be applied by analogy to the physical world, to life or the universe as a whole?

When the main facts are overlooked and the assertion is made that nature or the physical universe is best conceived of as a mechanism, worse evils follow than misapplied analogy. Such a theory makes the mind of both man and God a "shadowy concomitant" of brain or matter. It denies self-activity, which is one of the primal facts of life. It would make the knowledge of self-deception come the same way as truth. It denies the real difference between living and dead, natural and artificial. It conceives of everything as either identical or homogeneous. duces the individual to a phase of the universal. It takes principles applicable to one field and applies them to another, even though dissimilar. The law of mechanics cannot touch color or such changes. It obliterates the distinction between quantitative and qualitative. It gives no room for new beginnings in nature and man. It has no room for freedom. It ignores the fundamental fact that the thinker who conceives of this theory and the thinking are not mechanical. It denies the fact of struggle. cannot recognize the difference between torpor in plant life and spontaneity in instinct. It makes the universe unmoral. It suffers seriously from the fallacy of over-simplification. No place is found for the fact that ideals lure men onward and a man, unlike a pig is lured from above

and not driven from behind. There could really be no social problems in a mechanical universe, since both individuals and society act merely in accordance with what their nature under the circumstances compels them to do.

On the other hand if the analogy were applied in any true sense it would demand a place for a creator, for design, for purpose and for providence. But it is just the negation of these "needs" which constitutes the essential characteristics of the theory. Science, according to a wellknown writer, has a special function in educating mankind out of a belief in Providence.

The theory, however, has its agents. It assumes "interacting agencies" in nature; definite "modes of behavior" and eternal uniformity of action. One is inclined to ask here for page and paragraph. This conception of agent, if it can convey any definite idea at all is an analogy, not drawn from likeness to a machine but to a personality. If the thinking were only logical, then the spiritual universe, the one we know best, would find its rightful place and the thought truer orientation.

As a matter of fact the thinkers who accept this theory merely use the machine analogy to argue for self-governance from within, orderliness, interaction, uniformity and mechanical causation in nature. The central point is the latter. Given mechanical causation the others must follow or be assumed. This reveals the thinking wholly within the field of metaphysics. The inference is that personal freedom and initiative are self-deception.

Is it not fair then to ask whether this is not more desir-

¹ John Burroughs.

ing than thinking? An analogy of a machine, minus practically all the vital points the comparison should heed is selected, it is then transfigured and its opposite personal is used, and finally the sustaining elements in all human faith—orderliness and uniformity and causation—are grounded in physical nature. Thus men can have faith in the eternal subsistence of things because of the machine-like nature of the universe. There are some minds to whom faith in the regular workings of the universe finds its reasonable satisfaction when causation and continuity are grounded in Personality—and finally in a Supreme Personality.

The reductio ad absurdum of the theory is seen when we contemplate a free man, rejoicing in his freedom to clear away evils and create new truth, creating a mechanical universe in which he could not exist. It is surely the painter painting a picture and then vanishing into it; or to recall the old illustration, it is the man sitting on a limb and sawing himself off.

This mechanical theory can hardly then be used as a conclusion whence inferences relating to religion and morality may be drawn. The fallacy of the analogy is plain from a critical study of the process. When then the inferences are made, the fact of the fallacy is made more certain. For there is nothing mechanical in religion, nor in true morality. The essence of religion is its freedom, its absoluteness, its radicalness. It never has and never can be bound within mechanical limitations. Its field is much wider even than physical nature and of science itself. It is never bound by a mechanically controlled nature but it meets nature and conquers it. It eschews the

fixed nature. Its nature is achievement and achievement means mastery and control. Hence if this mechanical theory were true, this fact would merely signify that we must needs fight harder to conquer and win. Religion always looks through nature to the Great Cause and Providential Ruler, and will master nature in the purpose and determination to achieve union with this Eternal Personality. If this Personality is immanent He is not a "concomitant shadow."

The concluding criticism is that, though the symbol mechanism is used, the mechanical theory does not use a mechanism which is concrete but substitutes metaphysical Instead of any concrete machine, the theory concepts. makes use of the definition of matter as mass and force, and thus the concept of mechanics is an attractive force, common to all, working on a collection of mass points. The theory thus eliminates the senses, reduces the universe to mechanical units of length, mass and time, and denies qualitative judgments and subjective measurements. hereby repudiates itself, for it denies the place and validity of qualitative judgments, yet is itself just such metaphysical, dogmatic judgments. It builds itself up on subjective, theoretical, abstract and universal creations. It confuses fact and theory. It is reasoning from subjective consciousness to objective knowledge of natural action. This is why the theory is always presented as a conclusion or teaching of science.

CHAPTER FOUR

THE CONTROL OF LAW

The next of these fundamental, unshakeable conclusions to be considered is that all nature is under the reign of law. This means to the scientist that nature or the physical world, animate and inanimate, in its changes possesses a characteristically constant way of behaving. The natural agents which account for the action and interaction can be relied upon to act in a consistent, uniform way always. When then a type of action is discovered which operates upon a large and comprehensive scale this is a law. This law is just a description of how things act. When a descriptive law of such universality as the law of gravity has been reached it seems legitimate to speak of a reign of law. Things heavier than air will always fall to earth.

This conception or definition of a law as a description of how things invariably behave is the true, scientific one. From this standpoint there can be no miracle in the sense of a breach of a scientific law. This would mean, as Perry points out, that such a law had failed to hold within its proper field. But if a phenomenon, such as an ax floating upon the surface of water were attested or could be reproduced by experiment, this would not mean a breach of the law; it would show its lack of universality. Here would be new data to be explained or the law must be amended. The law as a description is not broken, it is rendered inadequate. Hence the scientist says that if he can be

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shown cases within his own field where his descriptive law is inadequate he will be the first to seek a more universal description. The invasion of his field with claims that cannot be experimentally attested—for such are his laws—he naturally resents.

The crux of the situation, however, as touching religion lies in another direction. The orthodox belief is that God is omnipotent, and that all uniformity and constancy of behavior in nature is due to the expression of his will and power. The reality in constancy of ways of action is not rooted in natural laws but in the will of God. It is evident that God wills regularity and the seasons will follow each other in regular order and the oak tree will produce acorns and grow with the roots in the earth. He therefore has expressed this quality of his character and will in the fixed or decreed laws in the physical world. These laws are not inherent natural behavior but decrees. God said and it was so. These laws are external to the objects of nature and control them. Some theologians confine the extent of the decrees to nature only while others comprise God himself within his own limitations. These thinkers say that because of this self-limitation God himself could not overrule the law of gravitation. Others, thinking of the omnipotence of the Deity and of his ability to change his mind, are ready to declare that he could suspend or change this law on a moment's notice. But if he did we need have no fear, for whatever he would do would be good and, to him, regular.

This explanation naturally does not suit the scientist. It is too general and does not come to close grips with the observed actions. The mere willing of the Deity does not

cover the means employed. It makes the cause of action and change in every case the same, and suffers from oversimplicity. It does not relate this will of God intimately enough with natural causation, and does not quite satisfy the fear that some day the Deity might find himself in an erratic mood. The early thinkers evidently experienced this doubt, so they conceived of the rainbow as being the sign and guarantee of constancy and uniformity.

Now all the scientist professes to do is to describe from a study of nature itself how action and change proceed. The how does not extend beyond the physical phenomena into matters personal. Thus he and the theologian may get along quite comfortably together. Remaining within his field, he enunciates such laws as the laws of gravity and of physics in general and here his word must be authority. The only one who can question his work is the one who, working in the same field discovers new knowledge. Today this is the position of the majority of theologians and religious scholars. As noted above men may believe as they do in God, and in his relation to the physical world, accepting the proved laws of science as the how of his will. There are others who will believe that the lightning of God does strike special spots at definite times, but the natural order still prevails. As long as the believers in special miracles cannot demonstrate them in the field of the scientist each can go his way rejoicing.

But this concordat is not satisfactory to our sciencetheologians. The evils of superstition, the fooling of the credulous with fake miracles and the general lack of confidence in nature, stirs these men into becoming crusaders for

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the truth. They then leave behind the work and field of pure science and become metaphysicians and theologians. They forsake the task of scientific description and create for themselves new thought-concepts with which they can speak authoritatively on the question of the why of action and interaction in nature. These new tools or metaphysical concepts are: mechanical necessity; action according to inherent nature; ways of behavior; the reign of law; attributes of nature; the rules of the game; instructive behavior or action and interaction personified. Through the use of these the hypothesis of the Deity not only may be, but must be dispensed with. For these concepts explain all there is to know or can be known. Nature is selfmoving, and selfsustaining and all action and interaction is fixed in laws which are the expression of the inner nature itself. Thus the relation of the Deity to the physical world is certainly not that of a directive Power nor of a possible Interferer. The hairs of our head may be divinely numbered but the story ends right there. The Providence of God is an irrational relic of primitive thinking.

Before, however, we accept this line of thinking it needs to be carefully examined. It is necessary to point out at the outset that it is not science but is metaphysics. It has not back of it all the weight that science in general has in the popular mind to-day. To call it science is to sail under false colors. Let it therefore appear in its true light. Not one item among the concepts can be scientifically demonstrated.

It may be asked next what value these metaphysical entities have for the purposes of rational thinking. What

is the nature of Nature? The scientist would never of course ask the question much less try to answer it. When then it is remembered that such is not known and could not be scientifically known it is seen at once that we are in the realm where anything may be affirmed. There can be no innate ideas but there can be innate natural law.

What then is the value of the affirmation which is not based on any scientific evidence that objects in nature are and they act according to what they are. This could be dismissed as another example of the wisdom which says whatever is is, were it not that it carries with it the assumption of finality as existent in nature. This is the old atomic theory of isolated, separate independence in a new dress, and is as valuable as this exploded theory. The thinking moreover is a begging of the whole question, for nature is defined as being in its own nature independent of the Deity and then this is used as the argument to establish final constancy in the physical world and abolish the Deity.

The discussion of the law of necessity has shown the fallacy of the effort to interpret all actions as really being the result of a rear push. Suffice it to say here that mechanical necessity, blind forced action applies only to a small portion of the universe. A rifle ball must go when pushed and a potato grows in accordance with the necessity of the conditions. But not so with human beings. We act from motive which is self-motion. We choose our way and accept the responsibility for what we choose and do. To say that this freedom is only a seeming while all the time necessity rules is to deny all knowledge. It means that some persons know concerning others what these do not know and what they deny for themselves. If their

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knowledge is necessitated and mine too then we need a new knowledge of knowledge.

The limit of enthusiasm is reached when Law is written with a capital and a Reign of Law is affirmed. Such a personification of a mental abstraction must be excused on the ground of enthusiasm. With such too goes the attendant and logical view that all nature is in some sense alive and therefore acts with a definite end in view. This contention represents the effort on the part of some who feel that the law of necessity really cannot be rationally defended yet they are loath to allow freedom and purpose to be otherwise explained than as being natural. So nature must in some way be made to act with ends in view. To add to the nature of nature the quality of purpose is a higher compliment than to eternally fix all objects in mechanical necessity; but this is another illustration of reasoning by analogy when the analogy hardly fits. Personal freedom and physical, inorganic motion are not identical or even like.

In summing up their case these theologians introduce the question of the relation of the how to the why. At the outset it is generally affirmed that science deals only with the how and leaves the why to the philosopher and theologian. But after dealing with such metaphysical concepts as the above the conviction of having exchanged the how for the why seems to become dominant in their minds. An explanation is therefore necessary. The change in our conception of physical explanation, writes Thompson, "is that we explain an event not when we know why it happened but when we know how it is like something else happening elsewhere or otherwise." The why is thus really explained in

the explanation of the how, hence there is no real distinction between these two ways of knowing an object or event. Difficulties are sometimes easily overcome.

This explanation explains only if there is no real distinction between science and metaphysics; between mechanical and personal action; between necessity and freedom; between necessitated action and idealism. To most men, however, these distinctions exist and are real.

On these grounds then it can hardly be admitted that the metaphysical reasons of the science-theologian prove an absolute divorce between God and the physical world. The absolute independence of nature and natural law and the implied freedom from personal manipulation and use cannot be said to be scientifically established. Much less is the inference valid that persons must be dictated to by nature and that the height of wisdom is attained when we submit with docile mien to necessitated natural law. The religious consciousness never has and never will accept this attitude of submission. This line of thinking does not take into account the religious conquest of nature.

A brief review of this religious attitude as revealed in our Bible will show the constant sense of superiority of the religious man to the laws of nature.

In the two versions of the Flood tradition both authors reveal the urge of the fundamental problem involved. It is the natural, human one concerning what basis men have for faith in orderliness, uniformity and constancy in the physical world. Is the Deity, who to be worth worshiping must have control over all things, constant in his will for orderliness? Or may a great catastrophe engulf humanity most any time? What evidence or assurance can men

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have? The answer is, that God has declared himself bound to orderliness, so men need not fear but that the seasons will follow each other in natural order and seedtime and harvest will not fail to meet the human needs. The one writer adds that the rainbow is the sign sealing this covenant of constancy between God and man.

Another writer to whom this question was apparently entirely settled turned his eyes intently toward the physical world. Amos saw nature quite entirely ruled by the iron law of cause and effect—to use modern terminology -natural or mechanical causation. "Shall two walk together except they have agreed? Will a lion roar in the forest when he hath taken no prey? Can a bird fall in a snare upon the earth where no gin is set for him? Shall the trumpet be blown in a city and the people not be afraid?" The answer is in each case, Certainly not! because cause and effect are necessary and absolutely related. On the strength of this belief he therefore pronounced doom upon his people because they had broken God's laws, had sinned, and the resultant punishment was inevitable. The same law of the inevitable relation between cause and effect prevailed both in the natural world and in the moral and religious.

A contemporary of Amos looking out upon the same natural world but from a different inner one reached a diametrically opposed conclusion. Hosea saw another law operative in human destiny which was superior to this mechanical, un-feeling, natural one. He does not deny the law of natural cause and effect but he declares that this is not the last word. Whether the story of the faithless wife is a bit of domestic history or an illustration, it re-

flects in either case the conviction that there is a possible conquest of natural law. An erring wife could be saved from the natural results of her evil ways. A transformation could take place in her so that another sequence of cause and effect resulting in goodness might become operative. God could forgive his sinning people and break no natural law. Cause and effect rules but personality can select or place itself in the position where this necessity produces the desired end.

Other biblical thinkers debated this necessity side of both physical and spiritual life. One declares that the soul that sinneth it must die; another, that pain and disaster are certain signs of a producing cause which is sin; while others held firmly to the power and goodwill of the Deity.

Then there appears that salient question, Who did sin, this man or his parents that he was born blind? Which said in plain words that God used the physical world for his purposes and his way was that of necessarily related cause and effect. But the answer is short—neither. God sends his rain on the just and on the unjust. The ways of nature respect not sin or piety. In these and other cases Jesus recognized the sphere and place of natural law.

This raises the whole question of the view Jesus took of natural law and of the relation of God and man to this physical home in which we find ourselves. It would be very easy to be dogmatic, since there is divergence of scholarly opinion. Jesus is the Son of God to many because he is thought of as having been able to seize natural laws by the handle and use them as he saw fit. To many others the possession of this power would not enhance his

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character or his divine superiority. It is recognized today that great deeds are always attributed to a great character when he is considered great enough by his biographers. There is also a distinction to be recognized in the miracles reported, between gifts of healing (Charismata) and the miracles of power (Dunamis), the casting out of demons.

Without entering into debate there are perhaps two facts relative to this matter which will not be questioned. The one is that Jesus fully recognized the orderliness, constancy and fixity of natural as well as of moral and religious law. Christianity would not take men up out of this world nor cause the rain to fall on the unjust only: it would make men conquerers of the world and its laws. Neither would the law of personal choice be overriden but he who chose the Good would conquer. There is no necessitated choice but when the choice is once made the law comes into play. How often would I have gathered thy children together even as a hen gathereth her chickens under her wings, and ye would not!

The other is that men may use the fixed laws of life both physical and spiritual either to achieve eternal success or invite failure. The laws of digestion are laws which men may use for their own good or ill. The wise man observes the times and the seasons. Oil in a lamp will burn and give light but men must choose the light and keep the lamp full. Passions tear some men asunder but controlled drive a great soul like Paul hither and thither to enlighten mankind. The natural instincts can be and are transformed into character. The metaphysical are of things is indifferent, so will do its work for the good man or the evil accord-

ing as it is used. The winds blow as is their way of acting but to the conquering soul it matters not whether they blow east, west, north or south; he will fight or use them according to his plans and purpose. Disease germs will come but the necessary death shall not follow. Death will come but it does not conquer. Christian morality means two conquests: the physical world and the self.

The use of the natural world is not confined to our moral conquest but much more to our religious. In fact this latter is first and conditions the former. The central fact for consideration here is the fact of conversion. We are not using this term in the meaning of some of the phases of the experience, such as the emotional or the intellectual or the act of will; but in all of these. Leaving doctrine behind, we would note the plain fact that men are changed and do change their relation both to the natural laws, to their fellowmen and to their God. The further point emphasized is that this change does not alter or break any laws: it is a change of relation to these. There may be evidence of a law of the jungle operative in a selfish and competitive character wherein one's fellowman is thought of as a beast or as a possible source of profit for ourselves. But this character is transformed and then our fellowman is viewed as a brother and a new law becomes operative, the law of brotherhood. So we view the life of goodness as the worthy one, ally ourselves with it and immediately the stars in their courses fight with us. We worship beasts and become beastly—the law works. We view nature as a closed system, independent, absolute and mechanical and the law will work which robs the soul of the religious spirit of conquest and attainment of the ideal and leaves it the

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ephemeral satisfaction of esthetic worship. We view the physical universe as orderly, constant and even in part mechanical but yet as conquerable and usable in our achievement of our personal immortality and the law will work. We will achieve. The rationality of the religious consciousness finds no reason in the effort to describe the physical world as absolute, as conquering and not as conquerable. This natural world is conquerable and this is reason and not *mere* emotion.

The general thought of the religious use of the world of nature brings into the discussion the christian teaching of Providence. The general interpretation of this doctrine is that in the physical world not a sparrow falleth to the ground without divine knowledge while in the human world even the very hairs of the head are numbered in his sight. God watches over his own, keeping them from harm, using the laws of nature as he pleases in answer to prayer and in general turning all things to good. The special point in the general conception of the doctrine is that God will send rain or withhold it, check disease directly and without mediating assistance and on occasion check the natural effects which a cause naturally produces, as a special favor. He will specially provide all things necessary and good.

The criticisms of this doctrine by the science-theologian are in the main that it impugns the majesty and fixity of natural law. A recent writer ¹ of wide fame argues strenuously against the doctrine of special providence but in favor of natural providence. The belief in special provi-

¹ John Burroughs, "Accepting the Universe."

dence he urges is untrue because natural providence is not intermittent but perennial; it takes no thought for persons; it reveals no deliberate and thoughtful action; it works by the hit-and-miss method; no god watches over man aside from himself and his kind; our inevitable anthropomorphism suggests sympathy and interest in us on the part of the universe; and there are no gifts in nature but all things are bought with a price.

Such observations are of value mainly as reminders of the obvious. But their further value is impaired by the fact that when a man looks into a universe which is natural merely he naturally will see none of the truly spiritual or religious. It is like the man living behind the high mountain who sees the universe as a mountain. This mental process of selecting a part of our world experience and calling it the whole limits its usefulness and truthfulness at the very outset. The main value of the process will consist in showing up both its own limitations and that of others like it. There are thinkers with like tendencies who see in this universe nothing much beyond spiritual reality. They too see only partial truth.

The teaching of Jesus concerning this doctrine reveals three outstanding facts. The first is that he saw more in the universe than mere force, mass, gravity, action, and interaction, and natural providence. He saw all this but more. "I and my Father are one." He reveals the full use of reason in his rational and sympathetic relation to the spiritual side of the universe. He found life and missed the cosmic chill. So do men at all times find the true life when they awake to the fact of and experience this spiritual companionship. When the human mind thinks with the

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Supreme Mind; when the sense of divine fellowship is rationally experienced; and when the sense of being a coworker with God enthuses the soul, then is when we can begin to write the biography of the great men of history.

Then Jesus does not take the unscientific attitude towards nature in the sense of the breaking of laws or the possibility of dangerous chaos appearing any moment.

He taught that to him who chose the better part all things were favorable, even the physical world. If we mistake not, the meaning here is to be understood in the religious sense only. From this standpoint the evidence is conclusive. The christian man by placing himself in the right relation, first to God and then to natural law will find that all things work together for good. Burroughs needed to have supplemented his vision of the place of human effort by adding to it our great allies, God and nature. Christian civilization, on its material and social sides, is our seeking and finding that relation to natural laws, whereby we can use them and turn their activity in our favor.

Can God then break a natural law such as that things heavier than water will sink? Science says no, while there are records which affirm the opposite answer. Many other answers have also been given. The one that the fixity of natural law is the concrete evidence of God's self-expression and therefore to break a law would mean divine self-destruction is of great value. Does not, however, the whole problem resolve itself into another question? Where are we to look for the source and guarantee of the constancy of constancy and the uniformity of the uniform workings of law? Is it in a mechanical, organic and material world

of nature or is it in a supreme Personality? The latter source seems to satisfy our rational demands, when the facts of human life, as well as those of nature are taken into consideration.

These then are the canons or dogmas upon which the science-theologian founds the conclusions whence he draws his inferences—conservation of matter, conservation of energy, the mechanical theory, and the reign of law. The facts a critical examination reveal are: true scientists do not regard these as conclusions but as workable hypotheses; they are descriptive phrases; they have been made into metaphysical theories by the science-theologian hence taken out of the class science; they have never been proved and cannot even be scientifically demonstrated, hence can never truthfully be classed as scientific conclusions. Inferences based upon such metaphysical thinking must then be evaluated for what they are. The essential point is that to place the authority of science behind such is quite wide of truth. A religion of science based upon such theories transformed into dogmas rests upon a very unstable foundation.

CHAPTER FIVE

THE SACRED BIBLE OF NATURE

ALL religions of advanced standing have a Sacred Book or Literature. This Book, unlike all others is a special revelation and it is authority. The religion of science declares that nature itself is the source of authority and revelation, but the revelation will be given only to him who seeks with open and properly prepared mind. Nature gives its revelation with a certain character of absoluteness, the knowledge is given immediately, and it carries with it the judgment that it is truth. This item of the religion is thus distinctive enough to be given a place by itself. Here we have what science calls its given truth. The proof of the postulate is in the results or in the fact that the belief in this given truth must be accepted else science is impossible.

Stated in other terms, science declares that for her purposes the physical universe exists independent and absolute; that this universe has an independent, objective existence; and if not absolutely self-existent apart from men's thinking is yet independent enough to be so treated; and that time and space are objective realities and not merely categories of the mind. This is the statement of the case as the true scientist thinks. When he calculates the specific gravity of iron or handles a plant he is to be considered as handling something concrete and not a mere phenomenon or a thought.

To treat physical objects as concrete reality and base scientific conclusions upon actual physical data is the province of the scientist. When he postulates his given reality behind the sense data he is assuming what he feels his labors and findings need and warrant. He says rightly that no one can know this reality as sense data. He nevertheless makes an affirmation concerning this, to him unknown reality and thus whether willingly or against his will he enters the field of metaphysics. Some prefer to stop at this point and rest satisfied with the as if existent reality.

The science-theologian, however, is not content to stop at this point. He feels a call to enter the field of metaphysics. Having made the step forward, he projects vast speculations, falsely names these scientific facts and then draws theological inferences. He also tacitly assumes that, since the study of physical phenomena has produced such valuable results, the same good results must follow the metaphysical speculation. The result is the theology or philosophy known as naturalism. The distinctive phase of this ism is phrased naturalism versus supernaturalism.

The conclusions which this naturalism lead to are clearly defined. The external world is actual and real. The phenomena we know is both the appearance or function of objective existence and the objective existence itself. Nature exists as absolute, independent reality, independent of our knowledge of it. The essence or reality is substance, matter or force. Matter and energy are eternally conserved, which is in keeping with the eternal character of nature. Here then is the primary reality of the universe. Here, in nature is the Bible, whence come inspired knowledge and

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truth. Nature reveals truth to the man whom she has created to receive it. Men, knowledge, religion will vanish but nature exists forever. The only true knowledge, then, is scientific knowledge and the only true religious and moral knowledge is contained in the science-theology which bears the name science.

The special theological inferences from these conclusions are two: First, the idea of the supernatural is due to misunderstanding, for natural causes prevail everywhere; and secondly, the revelation in the Bible, that is, the belief in the inspiration of the Scriptures is based on false and irrational knowledge. In place of these false premises must be put inerrant nature with natural causation.

Now the road to these theological conclusions leads through philosophy and theory of knowledge before it reaches its purposed end. It would be in order then to inquire how this scientific venturer fared on his journey through these territories, and if he comes into the field of theology with credentials which give strength to his new wisdom. The inquiry seems to find him, not only without credentials, but like a shipwrecked mariner.

The vital philosophical criticisms of naturalism have been formally stated by many writers. These judgments may be tersely summed up. Naturalism is not science but assertions about science labeled with this name. It abstracts one phase of the universe, the physical, and then fallaciously makes it the whole universe. Its concepts are given the character of generality and sufficiency, but they possess these qualities only as speculation. It parades in

¹ J. Ward, "Naturalism and Agnosticism," etc.

the garb of utter simplicity, but fails to note that the simplicity is a characteristic of the "knowledge of the thing and not the thing itself." ¹ It thus reveals a thinker whose mind is empty of diversity but who tries to make this diversity the mark of the universe. It fails to relate necessarily the eternal unchanging substance or matter which is unknown to the sense phenomena which is known. It cannot really explain law in nature, much less the facts of physical experience. It is a monism which engulfs itself in its own words. But above all it not only finds no place for moral and religious values but actually negates these. The philosophical credentials therefore are a summary of positively evil results and influences.

The theory of knowledge implied is a revival of the view of John Locke and thus remains innocent of the clearer thinking of Hume, Kant and other modern philosophers. If it were taken literally it would end in science denying what it professes, for sensationalism and immediacy can never arrive at knowledge. The naïveté of this theory is recognized by some modern, scientific writers, who realize that the claim, that scientific knowledge is the only true kind rests on unstable foundations. These thinkers have then produced a critical philosophy of science which uses non-physical terms and provides for non-physical methods and theories. The result is not only a repudiation of the natural theorists but ends by reducing the world of nature to forms of logic. The essential point to note is that the claim that scientific knowledge is the only possible knowledge is not supported by either branch of the scientific

¹ Perry, p. 66.

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metaphysicians. If we took these thinkers at their word science would lose very rapidly its prestige among men. It is therefore a service to science to brush away such unfounded and illadvised claims and give scientific knowledge its rightful place and evaluation.

In the field of theology the issue is stated as naturalism versus supernaturalism. This is the bible of nature versus our Bible. Whereas reference has been made and by some still is being made to the Scriptures as divinely inspired writings, which reveal authoritative knowledge for men, we to-day must divest our thinking of this delusion, change our source-book and go directly to nature. Here we will discover natural truth, which, because of its imperious and surpassing character, will automatically displace the supernatural. It is hinted that one of the greatest examples of service to humanity was accomplished when science relieved mankind of belief in the supernatural. But have we not here another example of the fallacy of simplicity?

The supernatural, as Professor Conklin sees it, is the revelation, which is our Bible, by reference to which theologians find authority for miracles, teachings concerning creation, special providence, and eternal rewards or punishments. If any of these revealed truths, it is declared, touch science they are of course to be considered the truth: if science does not accept the truth gladly it must be disciplined. This supernatural, however, when rightly seen is natural, and natural causation does away with the need of any such external references.

Now this definition or view of the supernatural is entirely too narrow. It is a selection of the application of the belief in the supernatural to a collection of sacred

writings. It turns the discussion then away from the supernatural in general to such questions as: Does the Bible intend to teach science? What is the value of the creation stories in Genesis? What about the miracles noted in the Bible? How are we to evaluate the ideas and beliefs of our biblical writers? It is evident that these questions may be answered—even negatively—and the whole problem as first stated remain.

What, however, men of science really desire in this connection is fair play. They rebel, as all free men do, against mere authority. They rebel against the supernatural because it is used to bolster up dogmatic pride and unthinking authority—which all too often hold back the progress of truth. It is one of the tragedies of human progress that good, enthusiastic, courageous men like Saul do not all become a Paul. The real problem then is, What is the truth in the belief in the supernatural?

There is a distinctively modern viewpoint which is gaining ground mainly because of the method used by modern scholars. The modern Literary and Historical or Scientific Method seems to have advanced us nearer truth.

Let us consider first the applications made by these science thinkers of the belief in the supernatural. Take the question of the inspiration of the Bible. The theory rife in Josephus' time but made very prevalent since Luther's day is that of literal inspiration. Every word, jot and tittle was either written or dictated directly to and through the human amanuensis to men. The Bible is therefore in no sense a human product. It moreover can be read and understood by any one and must be taken literally. When, therefore, the Bible says: "The sun goes

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forth . . .," scientists must know that the sun moves and not the earth.

Now this theory has been discarded long since by all thinking men on the evidence of the Book itself. It had to go as soon as we learned when writing began among the Hebrews, the nature of early writings, the facts about the subjects treated and the writers, and the history of the preservation and canonization of these selected books. Internal evidence, which reveals the processes of collection and editing, the character and tendency of the author, the differences of viewpoint, and growth in moral and religious outlook, all confirmed this judgment against literal inspiration.

Then followed the inevitable result. To some the Bible became, as the result of these critical studies, merely literature. To others, on the contrary, it represents values which can only be called inspired or supernatural—something above other writings and literature.

The fixed fact in the whole matter is that the Bible has had a history. It is a culled literature selected from a large body of varied writings. The sixty-six books represent the result of selection where fixed standards were set up. It is fundamentally religious and moral literature. It contains every variety of human writings. It has filled and still fills and will continue to hold a large place in human life and civilization. There are no other writings of equal value.

Is it then literature? Certainly so! But care must be taken here to note that the definition of literature may be revised upwards. There is no such thing as *mere* literature. Is it inspired? The answer is its value and the

values it holds up for mankind. Does the Bible teach science? The Bible in the true sense teaches not. It is a record of religious and moral thinking and acting which is of supreme value for human education. Some of the writers naturally touch upon matters relating to the physical universe, but all do not take the same view, as noted above. Why should we try to make earlier thinking on matters relative to the physical world per se authoritative for to-day?

The facts relative to Genesis chapters one to three include the knowledge of two different types of writers, both of which are working over older Babylonian speculations. These two authors do not agree on all the details nor in the use they make of the borrowed tradition. The interest of each is decidedly religious rather than scientific. If either they or their predecessors discovered scientific facts which can be experimentally proved to-day, all the more honor to them. It may then be said that modern biblical scholarship agrees with the scientist, that he should go ahead and increase our *scientific* knowledge of the physical world without the feeling that his labors are going unappreciated.

This modern method of biblical interpretation, if it were given the place it deserves among the professed interpreters of the Bible would relieve the present tension between thinking men and religious leaders. It would accomplish this desired result, because through its use each book and statement of the Bible would be understood as the author himself intended it should be. We would not be trying to make an eighth century B.C. herdsman speak the language, wholly, of the twentieth. The fact that some

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of our biblical seers did, by times, rise above their times and give utterance to timeless wisdom is the source of perpetual value of the Bible. But all the beliefs and wisdom of these writers is not timeless in value.

The principle of natural causation is more and more gaining a grip on our thinking. According to this principle the thinking of the eighth or the third century B.C. as represented in these creation stories is considered the natural product of the conditions of that time. The belief in providence is explained as the effect of a contracted view of both the universe and of God. If a miracle ever does occur it will be found on thorough research to have a natural cause. If a man is possessed of devils there is a natural reason. Jacob's dream was probably caused by his uncomfortable position and the hardness of his stone pillow. If one afflicted becomes well there is a natural cause though it may not yet be known. If a man is prosperous, the cause is his thriftiness and not the providence of God. It is unnecessary to relate even the sudden, the extraordinary or the apparently unexplainable to direct action of God or any supernatural agency. Natural explanations can therefore be found for all events or thoughts. The world of thinking has thus been cleared of much of the superstitious and the shallow, and the world in which we live has become better known. However, we have as yet touched but the fringe of the supernatural.

This issue between the natural and supernatural is expressed by other thinkers in a different form. Two realms are defined as standing over against each other: the realm of nature versus the realm of grace. The natural man, living in the former of these, is of the earth

earthy and must go the way of earthy things plus eternal damnation unless God's free grace arrests him and converts him into a spiritual man. No man can save himself for salvation is of God. Something supernatural must find him and he be born again if he is ever to attain unto his real destiny. In the lower realm each person is compelled to choose but in the upper he is acted upon and assured (with theological variations) of the supernatural existence.

Now neither of these citations do more than touch the real issue in the matter. This theological teaching expressed in the doctrine of separated realms is thinking which moves in the sphere of the magical and not the supernatural. First the two realms are defined as separate and then naturally the passage from one to the other could only be made by a miracle or magically. Hence the large appeal to mystery in much religious thinking. But if we would save ourselves trouble over gratuitous problems and see that life is a whole and that the difference between the natural man and the spiritual is a difference in quality and not a separation, we could view the supernatural as different from the magical.

Conversion is a fact. Twice born men abound in our midst but their present character is not the product of magic nor of natural causes in the sense where natural relates to the physical world.

What then is the supernatural which is greater and beyond a theory of the inspiration of certain writings or a theory involving magical change? It is the Other World, the greater values, the supreme meaning of life, the eternal destiny, the supreme Personality by reference

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to which and in companionship with whom men interpret and evalute both the natural world and our physical existence. It is the rational observation that we are citizens of two worlds, one yet distinct, the life of the one being temporal while that of the other is eternal.

The knowledge of this higher world and higher life is not a mere intellectual judgment of values nor the product of emotion, but a matter of personal experience. And the fact which stands out in clearness is, that we evaluate this experience as more real and abiding than the experience of the physical, natural life. The very essence of life—true life and abundant—is known only when this higher experience dominates. Conversely, if this were taken out of life, then our science-theologians would not care to remain here long enough to enjoy the cosmic thrill, contemplate the wonders of nature or esthetically worship the True, the Beautiful and the Good. It is the supernatural which gives value to the natural. It is the supernatural shining through the Bible which is its inspiration.

This then is the real fact in our creation stories. The religious soul here expresses the vital, religious judgment that the supernatural holds the place of primacy. In the beginning or in beginning, God. The application of this assertion of highest reason may by times overlook the distinctive characteristics and laws of the physical world, but such is a mere incident. An untenable theory of inspiration does not dismiss the supernatural. An untenable philosophy based upon separation rather than distinction does not carry the supernatural with it into the discard.

The issue then between the natural and supernatural,

when clearly stated, is the relation between the facts of physical knowledge and the facts of super-physical knowledge. It is the relating in our thinking of two sorts of knowledge and experience. It is relating facts and values. Our physical existence is part of a larger physical world to whose laws and workings we are subject but by which we are not controlled. Our personal (spiritual) existence is part of a spiritual universe whose laws and workings we are subject to and which if we will may become in us immortal existence. These two are not separate—except in bad philosophy. The christian religion reveals its universality and rationality when it looks upon life as a unit physical and spiritual, here and hereafter. For he that leveth not his brother whom he hath seen cannot love God whom he hath not seen. The life and character achieved in the now differs only in degree from its fullness in the then.

Unity, it must be noted, is not uniformity but related diversity. Unity and diversity are correlatives. There could be no unity without diversity, for it takes two always to make one. If all colors were blue there would be no color. If God were one in any pan-psychic sense he would not be God. Pantheism, the natural result of over-simplification, in its endeavor to dissolve diversity dissolves merely its own self into the naïve simplicity of its own thinking.

These considerations give the setting for observing the difference between natural law and supernatural law while both are phases of our unified life. The difference is between quantity and quality. In physics the weight of the blow as cause determines the distance the ball will

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travel as effect. This quantitative causation conception was carried by the Babylonians and early Hebrews over into their judgments of justice and right and even forgiveness. Advanced thinking and observation upon life's experiences has shown that this is not the truth. The law of quality prevails in the higher (supernatural) life of mankind.

This law of quality is seen to-day in our law courts when motive is considered and given a large place. It is seen in judgments of leniency or extreme harshness. It is manifest in the joyous relief from the strain of life which comes to those whose citizenship is in the Higher World as well as in this one. The quality of mercy is not strained. It is only in the freedom of and the anticipated attainment of the eternal values that men come to know real life. For life in the supernatural moves in an atmosphere of forgiveness, willing self-sacrifice, going the second mile, exceeding duty, in short of being the cause itself and not its illustration.

Then the life centered in the supernatural world of values and personal satisfaction is the one which is motived and lived from before and not within the iron-bound scheme of necessity. Truth is immediately known, not from nature primarily, but when the person comes to know the Supreme Personality. Civilization, which is increasingly qualitative, individual worth and social relations are the product of an increased insight into, and appreciation of, the real qualities of the Supreme Personality and the real character of the ideal man. This is why civilization improves where christianity prevails: men see the ideal. Jesus' sacrifice of himself for his principles accomplished

more by the further revelation of his character and spirit than it did by any appeasing of the wrath of God or by satisfying any preconceived idea of divine justice. One man of the qualitative personality of Jesus of Nazareth is a cause where effect can hardly be traced. Can it be said that value in the strict sense applies to things at all?

Consideration of things supernatural will include also the must of life. There are two sorts of must. I must eat or die because of natural law. I must be a brother of man or die because of supernatural law. The first kind is the must of natural necessity: the second is of choice. Under the first we submit because of force: under the second because of joy. The first begins and ends in itself: the second is just the beginning, since the end lies far beyond and is measured by eternal value.

Naturalism in its religious relations thus seems to point to abject failure. Nature's revelations are too limited to cover the whole of life. If men were dependent upon these revelations alone, then not only would we never have received the knowledge of values but also knowledge of our-For nature could hardly reveal the consciousness of personality nor that higher standard which as an urge and a lure draws men onward and upward into eternal attainment and immortality. The only logical thinker here is the one who capitalizes Nature, but he of course does this illogically and overworks an analogy. Thus instead of revealing the higher values this philosophy denies their very existence. Nature must be double-minded if it reveals itself as negating supreme human values yet gives to man the spirit to rebel against the authoritative revelations. This very inner rebellion against the plea for the

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natural condemns it. It is a rational rebellion, too, for the system has no place for good and evil, character, moral values, or human progress. It makes the end of life the extinction of all spiritual life. It stands still while men move on. It kills all endeavor, for there is little courage to strive and achieve if we individually and as a race finally sink back into the eternally changing, changeless substance. In such thinking there is no profit for religion.

The incisive observation of Hudson may sum up the matter. "Such a world-view requires a moral valor that it cannot give." This revelation of nature calls for courage for the sake of being courageous. For the truth to which men must be loyal irrespective of whither it leads, is a world-view full of negations and materialistic. It surely therefore requires more than natural courage either to try to hold this view and the christian truth at the same time or to try to live superior to the natural processes when the moral and religious life is fated after millennia of struggle to disappear. But truth should command better credentials.

CHAPTER SIX

THE CREED-REASON

The items of the creed of the science-theologian may be conveniently reduced to two: Reason and Evolution. These two he believes in firmly and completely. The term reason may sum up three related beliefs: the rationality of the world; the practical identity of science and reason; the rationalistic method of interpretation. We will examine these items of the creed in themselves and in their relation to the religious beliefs based thereupon.

The principle of the rationality of the world expresses the belief that nature is uniform in all her ways and doings, that in the sequence of changes there is consistency and coherency, and that all these processes "are comprehensible by the human mind." Such a belief is necessary to science where observation and experiment touch only the empirical objects. Without this faith there could be no law, since chance is not properly cared for. Likewise, without this substructure, scientific knowledge could never pass beyond the stage of the passing observation or experiment.

So far this creed is universal and not specifically scientific. The man on the street orders his daily life on the accepted or reasoned belief that the sun will be seen tomorrow and nothing will occur in haphazard fashion. Every man takes for granted continuous, ordered, coherent, natural action. But when the reason for this belief is

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sought another phase of the situation appears. Physical scientists rationalize their faith by declaring that "the world is an adjusted, regularly working system characterized everywhere by invariable, causal relations." This characterization is the conclusion based upon the analogy of the mechanism. Then rationality of the world means this orderly, adjusted, invariable working system. Logical, causal sequence is rationality. The more recent scientists, the biologist, the sociologist, and psychologist offer a different type of rationalization of their faith. This is, that it can be observed in the workings of nature that certain organs or organisms seem to have been so rationally designed as to realize certain definite ends. The stomach digests everything that comes into it but never digests itself. The horse's mouth was made for the bit and nature is equipped with powers of self-healing and self-preservation. Wherever therefore there is discovered in the natural world evidences of objects which exist for certain ends or adjustments which seem fitted to bring about certain ends this is rationality. Evidences of purpose reveal rationality.

There is a third way of rationalizing faith which speaks in terms of value mainly. Suppose the eye is purposed to see, what is the value of the whole process? Suppose the body is fitted to ward off disease and self-heal, what about it? Does this fitting of organ and end serve any end of value? Our thinking always submits all knowledge to judgment in relation to a further value. There is a value in itself (relative) and a value beyond itself (final) in all things. The highest form of rationality is then discovered when the value of this present life

and this present natural world is seen to be in the contribution to the immortal life of man.

The result of these modes of thinking is that there are present to-day three outstanding definitions of rationality which are general and are applied to the whole of the objects of thought and life. These are: orderliness, purpose, value. The science-theologians use the first, a few refer to the second, all reject the third. There is rationality only where natural causation and logical coherence are manifest, with purpose as opposed to chance.

These facts give the means for evaluating this creed of the rationality of the world in its relation to religion. The creed as used contains two self-limitations. It narrows rationality practically to logic and orderliness and thus prevents the would-be theologian from dealing with religion in any adequate manner. It also applies a standard of rationality, which is at home in the physical world to the higher spheres of life, where such is not at home, or wholly inapplicable. These two limitations are vital and should be restraining. But they are not. Proceeding from the conception of reason as orderliness, and perhaps purpose, the "thinking" scientist identifies this reason with science, and also identifies the rationality of the physical world with that of religion. When then he essays to use the Bible and religion in his process of rationalization he abandons the scientific method for the rationalistic. Both this method, and this contention that science and reason are identical, may be seriously questioned.

That the religion of science is rational and the only rational one is the claim. The bases of the contention are, that while religion is related to emotion, science ap-

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peals to reason, and that scientific knowledge, being identical with rationality must be the judge.

For a concrete exposition of this view we may again turn to a work referred to above. "The appeal of science is chiefly to reason . . . of religion to emotion. . . . Reason, alone, that is, the power of generalization and abstract thought is wholly limited to man. . . . Reason and consciousness disclose to man the scientific knowledge of the physical world, the problem of evil and the real solution of the problem. The most intelligent types of men may find relief from 'Fightings within and fears without,' in science or philosophy, but the great mass of mankind . . . have found relief in religion." Religion thus ministers to human comfort and happiness, but moving as it does within the sphere of human needs and desires, it can never develop a faith which can satisfy the reason. Religious thinking, then, to satisfy rational thinking men must be made rational, which is the same thing as saying it must become scientific. Thus faith must be guided by knowledge, emotion by reason. Emotion develops a sort of intellectuality of its own which, however, is not reason but may be controlled by reason. A religion of science is therefore religion made rational and satisfying to the reason of intelligent men.

The basal, assumed fact in this argument is the definition of religion as emotion and as the product of emotion. This is now a very widespread view of the character and origin of religion. It, however, is a definition and a view, the truth of which may not be accepted uncritically.

¹ Conklin, "The Direction of Human Evolution," pp. 161, 162-167. In part Summary.

Religion is assumed to be a derived product because the theory of evolution means or teaches it. But this teaching does not establish the fact. It is basing a conclusion upon an assumption. Moreover, it is arguing in a circle because evolution is stated as a theory and then a sequence is outlined from instinct or emotion to religion which is both the product and the proof of the theory. This removes any real ground for assuming that religion is a derived product. The historical facts relative to religion are, that it is an absolute, it is a parent, it creates, it is independent in action, it evaluates and eschews all natural limitations, it is primary and not secondary.

The psychological background which admits of a separation between reason and emotion assumes the lack of unity in the self. It assumes an independence of the different phases of selfhood suggestive of the working of the philosophy and psychology based on the atomic theory. Just as the atom was defined as absolute, independent and selfexistent, independent of any relations, so feeling or emotion at one time and reason or intellect at another are so conceived. The distinction between intellect and reason, on the basis of generalization and abstract thinking, is too fanciful for serious consideration. The psychology, on the other hand, which proceeds from observed facts relative to the human self has no place for this theoretical separateness of feeling. The human self is not a made-up collection or assemblage of feelings, intellect and will: these three are modes of expression. And no person ever expresses himself in any one of these phases alone or singly. The whole self is present in all thinking, feeling

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or willing, though one of these self-expressions may be the more prominent. Moreover, there is no feeling apart from or inseparable from its idea. The intensity or thinness of feeling is dependent upon the quality or force of the idea with which it is associated. Religious passion is distinguished not as a different kind of passion or feeling but by the character of the ideas with which it is associated or blended, and by which it is qualified. Thus the effort to relate religion to feeling and deny its rationality rests upon a false psychology and philosophy.

The contention is further disproved by obvious facts. Hocking calls attention to the fact that religion never takes itself as a matter of feeling. It deals with the objective much more than the subjective. The work and teachings of the great moral prophets testify to this generalization. Religion is not interested in making men feel but rather in making them believe, do and achieve. the enemy of that emotionalism which spells selfish enjoyment and never issues in concrete human and social bet-The religious appeal which moves and creates religious men is not to feeling but to ideas. There is a contagion of enthusiasm but this emotionalism dies when the man behind the moving enthusiasm disappears. strength and continuity of religion is not in feeling but in ideas—faith. All religious progress comes, not through feeling which is unprogressive, but through ideas. gious progress is noted only when new and enlarged and clearer ideas of the Supreme Personality or the supreme values are gained. These enlarging ideas qualify emotion. Feeling never changes or improves feeling-only

thinking and gaining of knowledge does this. And that higher knowledge which changes men from being beasts and animals into beings like unto the Deitv is well called Revelation.

Religion has been described as the product and manifestation of desire which is feeling. This description, however, is not based on observed fact but on an analogy. Animals desire and find food; so it is claimed there is in the human animal a desire, the manifesto of which is religion. The analogy, however, is not well taken. In animals the desire when satisfied disappears but not so in religion. The more men know of the noblest life and of the eternal values the greater is the desire to attain increased. The appetite for the supreme values increases with the growing participation. Then, again, this description reverses the whole process. We love God because he first loved us. Our desires become prominent when the knowledge of the Other World is a possession. Men desire in proportion to their appreciation of the higher That man is incurably religious, means, that the Light which streams on him from the world of Eternal Reality ravishes him. Loyalty is not self-compulsion or mechanical urge, but is born and nurtured by the captivating rationality of the eternal values.

Religion is of the heart rather than of the head, so it is affirmed, because "out of the heart are the issues of life." This statement, it is argued, proves the emotional ancestry of religion. But the distinction here is not a psychological separation; it is the distinction between intellectual systems and judgments of value. Amos noted the distinction when he compared the zealous religious life, centering in

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traditional beliefs and practices, with the one of greater value, which was being missed. God cared more for the poor man, who was compelled to sleep cold, than for the continuance of that religious institution which commanded the coat as a pledge. So the Pharisee tithed and did all the law, but omitted those acts, and failed to attain unto that character which valued the need of the poor widow above twenty per cent interest or the placing of Corban upon a gift. That religion takes note of human sympathy as well as of institutions and systems is the mark of its all-round character.

We miss the truth, however, if we center our thinking upon the either-or, instead of upon head and heart. "These (things) ought ye to have done and not to leave the other undone." Religion is both rational and emotional. Study of the history of religious progress shows that there comes first the attainment of knowledge of the Other World, which knowledge is attended by certain emotional intensity. Then comes enlarged knowledge, such as of God and human destiny, which is at once intellectualized into a system of beliefs and practices and clothed with emotion. Then, again, comes new knowledge which breaks the old vessels, dissipates the emotion, creates a new set of beliefs and practices and immediately attracts emotion. So the history proceeds: idea creates, emotion drives. The fact is not often enough emphasized, that it is the christian and prophetic teaching, that God cares for every individual, and even suffers with men, that produces our feelings for the sick, the poor and the downtrodden. This is not an emotion but a conviction with emotion. Those scientists who have not this conviction, naturally,

are not moved by the sight of the maimed and the weak; so they call our christian care for the needy unscientific and an error.

When, further, it is said that religion is of the head, the reminder comes that no man by searching can find out God and that the babe knows more of religion than the educated thinker. This latter reference, however, in its historic setting is an echo of the fact that it was the common people who heard Jesus gladly. It is common religious history that a new movement begins among the masses; hence this reference to the unsophisticated is understandable both in the light of this fact and in the light of our knowledge of the effect of traditionalism upon men. There were, however, others of the thinking class, even priests, who understood Jesus, though the number reported is not large.

The venture of an analogy might be made in this connection. There is a difference between discovery and invention. In discovery new light for which we have not labored and for which we have not searched dawns upon the mind. Sometimes this light comes all of a sudden; at other times, when we think we are approaching the exact opposite; and in a few cases it comes by reasoning, as in the case of the new planet. When, then, the new light or truth has come, inventive genius turns it to account or enshrines it in machines or institutions. So in the attainment of religious knowledge. The history of the great religions reveals a Hero or Leader, who, having received a revelation seeks to bring all men into the knowledge of the Truth. The new discovery is domiciled in beliefs, creeds, institutions (inventions like engines, bat-

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teries, stoves for electricity), and through these men are instructed and transformed by the new knowledge. There is one point, however, where the analogy fails. In religion the creed or institution often runs on when the electricity—the spirit—is absent.

The points, then, where the analogy holds are: religious knowledge is primarily revelation, in the sense that, as the human self grows from childhood, there comes the time when the consciousness of the Other World and life's higher values dawns. This comes not in the sense that it is created by thinking, it comes in the ordinary process of human thought. In the course of living and thinking other discoveries are made (revelations). To outstanding men and women epochal revelations come, which, when tested in life, are singled out as superior. Revelation is both epochal and everyday, congested and continuous. superior discovery is one where we realize we have touched finality. Then comes the invented creeds, dogmas and institutions—the necessary dress—which needs to be changed with the growing life. Is there not also a sense in which men by searching find out God? Just as men reason from certain physical facts to the conclusion that an undiscovered star must be in a certain location, so we reason that when we find the universe rational, our partial knowledge must argue for the absolute Knower-the Design argument. Experience then completes the knowledge.

The vital weakness in the effort to reduce religion to feeling is the lack of differentiation in feeling. Paul was enthusiastic and felt his religion intensely both before and after his conversion, but his feelings do not indicate

the difference between Judaism and Christianity. This difference is nowhere discoverable in the realm of emotion but is in the realm of religious and moral knowledge. New and different conceptions and experiences of God, man, society, sin, salvation mark the difference. If religion were emotion then all religions would be the same and indistinguishable and religious evolution would be impossible. There would be no religion of science, for all isms would be identical, except in lung-power.

There is finally the oft-repeated theory that the main emotion out of which religion has evolved is fear. This theory is supposedly based upon historical observation of primitive religions. But such theorizing at once arouses suspicion, because of its simplicity and also because of the easy disposal of the origin and character of religion. It is rather an arbitrary process to single out this one instinct or emotion when there are others, such as love, which are more valuable for theoretical purposes and just as prominent in primitive religion. But history does not disclose any such a fact. In one of the oldest religious institutions, that of sacrifice, the earliest form was the sacrificial meal, of which, in the most friendly relationship the God partook. The element of fear was conspicuous by its absence. Moreover, early peoples commanded their deities much more than they feared them. The element of fear enters religious history when the nature deities came to hold the place of honor and the fear of some aspects of nature was transferred to the deities.

But still further there is a fundamental difference between natural fear and religious fear. Religion both

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encourages and destroys fear: destroys the natural and encourages the spiritual. This latter is not physical fear with any of the emotional characteristics, but is rational. "Lest having preached to others I myself should be a castaway." This fear, which is the beginning of wisdom, like all fear, is determined by its object. The physical, raging lion produces physical fear: the God in whose hands human destiny lies inspires the holy fear that we by our ignorance or wilfulness might miss that destiny. An interesting bit of religious biography is revealed in the words: "Though he slay me yet will I trust him." Thus religion, instead of being the child of fear, is its master. It would be an interesting sidelight upon the nature or peculiarity of evolution if such a phase of human experience as fear should out of itself evolve religion to rule or destroy itself. Religion, however, both destroys and creates fear-destroys the physical and unreasoned and creates the holy, character-developing quality.

The other phase of scientific belief in Reason refers to the method of interpretation known as the rationalistic. This is the method used by the science-theologians in their interpretations of the Bible and religious history and phenomena. The method may best be understood by comparison with the four others more or less in use to-day. These are the literal, the prooftext, the allegorical, and the scientific or the literary and historical.

The literal method takes every word or statement in a literal sense, irrespective of whether the author is writing poetry, is using a figure of speech, is using any of the dif-

ferent literary forms of expression or expresses himself in the mode of thinking of centuries ago. It ignores the history of the statement and assumes it is a direct word of God. By the prooftext the interpreter first fixes upon a belief or judgment and then goes to the Bible or history of religion for texts which prove the already accepted belief. The allegorical declares that a writer says one thing but means another. It is the business of the interpreter to reveal this true meaning. The scientific, better known as the Higher Criticism, approaches the Bible by the historical and literary path and seeks through the knowledge thus attained to ascertain the mind of the writer. It aims at letting the Bible speak for itself.

In contrast to these, yet alike in some particulars, stands the rationalistic. This method declares that there is a natural cause for every effect, which when known explains the phenomenon. It identifies this causal coherence with reason and makes it the standard for judgment and evaluation. It declares that what science teaches is final truth and therefore judges all things. Thus miracles are impossible because science discovers none such. That God created the world is impossible since matter is eternal. So this rational interpreter of the Bible and religious phenomena has a method which interprets and discloses final wisdom.

The interesting fact which immediately stands out here is that the scientist, when he turns theologian abandons the scientific method and adopts a most decidedly unscientific and dogmatic one. And also, that it is modern biblical scholarship which has adopted the truly scientific method of interpretation.

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The Higher Criticism is this scientific method. The modern biblical scholar, before he will essay an interpretation of any part of the Bible or any religious phenomenon, seeks by impartial and thorough critical study to know first the historical origin and literary form. He seeks to discover the historical origin through learning of the author and the times when a writing appeared. All thinking is primarily organic to its times. He will then seek to determine the literary form, since this will point to the mind of the writer. He can then make some judgment of values. This method has many commendations but the main one is that it gives the biblical author the opportunity to speak for himself and thus leads nearer to truth.

In comparison with this scientific procedure how unscientific appears this rationalistic! One of the reasons why this Literary and Historical method has not made headway faster is because many have confused it with the rationalistic. This was natural because it is called the scientific. But once seen clearly there is no further danger of identification.

The weakness and evils of this rationalistic method are many. It is pure dogmatism—worse than ecclesiasticism could be guilty of. It is absolutely unscientific, for there is no critical study and evaluation but the application of a dogmatic standard. There is no adequate appreciation, for example, of the many phenomena called miracles in the Bible but miracle in general is dealt with. It ignores the historical facts and values. It is individualistic. It bases its judgment upon a claim for the value of scientific conclusions and teachings which certainly cannot go unquestioned. It defines reason in an entirely too narrow

fashion. It omits the very rationalism which alone applies to religious knowledge. It applies laws which are valid in mechanics and in dealing with organisms but which cannot be applied to the things of the spirit. It dogmatizes out of life much valuable truth.

The inadequacy of this method and the superiority of the truly scientific may be illustrated by reference to some of our outstanding biblical problems, such as Creation, the Virgin Birth and the Resurrection. All of these are imperiously negated, since they do not seem to be in agreement with certain scientific doctrines. Matter is eternal, hence uncreated, and science knows of no miracles.

Take the biblical stories of creation. We refer to these again because the creation of the world is given large place in the writings of these science-theologians. The historical facts are that there are here two versions of an old Babylonian tradition from two different schools of writers. The versions do not agree in all detail and the use made by each writer of the ancient tradition differs widely. Whether either writer thought he was mediating scientific knowledge is open to question. In any case the predominating motive was religious, and God is given the place of primacy. Theirs is a philosophy of the universe based upon the primacy of personality. Instead, then, of dogmatically ruling this out of court in favor of a philosophy which logically leads to materialism it would be more fair to show the two philosophies and let men rationally decide which they prefer. We submit that it is just as rational—to go no further—to accept the philosophy of personality.

The story of a Virgin Birth is discounted on the ground

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that such is irregular and irrational. Science knows of nothing of the sort. The historical facts in the case are again overlooked. The main one is, that Jesus was personally known first and as a result of this knowledge many could believe in this story of his birth. This story also is one of the three or four ways in which the men of that time tried to give expression to their faith in the superior character of Jesus of Nazareth. It is, therefore, an historical attestation to this basal belief and care should be taken not to throw out the baby with the dirty water. To merely call this a miracle and then dispose of it summarily is to lose vital historical truth.

The narrative of the Resurrection of Jesus is likewise summarily dealt with, but with more dangerous consequences. The historical facts overlooked are very significant. It is known that the claim of a resurrection has been made for others, notably of the Egyptian King-God Osiris. Many cults of the time of Jesus were enacting passion plays in which death and resurrection figured prominently. Some New Testament writers refer to what is termed the resurrection faith, in which the concrete circumstances figure slightly. But the main fact is, that to the first believers it was not the fact of a resurrection which established their belief in the divine character of Jesus, but just the opposite. Men first knew Jesus and could then believe in his resurrection. It was the impression of his personality which made the resurrection faith possible.

Moreover, there is a difference between resurrection and immortality. The first of these is Jewish terminology and is based upon the thinking which never separated

body and soul. The second is pronouncedly Greek and is based upon this separation. Paul's idea is more Greek than Jewish or Hebrew. Thus the essential fact is that the impression of the personality of Jesus carried men's faith through death to the immortal existence. To one shaped by Jewish thinking a resurrection was necessary to complete the intellectualization of the faith. When these facts are overlooked, all too much is sacrificed by this rationalistic method.

Thus we are forced to conclude that science and reason are not identical. On the mechanical side of the universe no one in his senses would deny the attested descriptions of mechanical causation. Likewise, on the organic side logical sequence commands the assent of reason. there is another phase of the universe, the personal, where persons are free and creative and where other rational laws prevail. Judgments of value are the final judgments and reveal the highest form of rationality. These judge even logical sequence and the world of nature with its own And judgments of values proceed from the appreciation of the immortality of personality. For surely man does not exist merely as a solitary observer of the great, dramatic, cosmic, eternal evolution, to be finally swallowed up spurlos versenkt.

CHAPTER SEVEN

THE CREED-EVOLUTION

The present is the legitimate child of the past and will be the legitimate mother of the future. This is the accepted definition of the theory which has so profoundly colored the thinking of the last few years. For the theory of evolution seems to be so thoroughly established that few think it even necessary to-day to argue for its validity. It is one of the scientific conclusions upon which the religion of science is based. The term "religion of evolution" is also being used. Evolution is called a fact by the over-enthusiastic, but to the more modest it is a theory deemed sufficiently established.

It is claimed to be scientific theory, but this claim needs some explanation. It is not science in the sense of pure science but is the scientist as philosopher or theologian. It is an effort at the systematizing of all scientific knowledge and conclusions, hence is science-philosophy. Since a system must be characterized by comprehensiveness and universality, the thinking naturally endeavors to cover the whole range of knowledge and knowable objects. The above definition is sufficiently comprehensive to admit of this universal application.

A short sketch of the historical origin of the formulation of the theory is essential before a critical examination may be undertaken. This sketch begins with the theological teaching over against which this modern revival of ancient

thinking takes its stand. This is known as traditional or orthodox belief.

Orthodox theology states that the Bible is the revealed truth of God and is absolutely authoritative upon all subjects and matters. One of the revealed, authoritative truths is that God, by direct fiat, in six successive days created this physical world out of nothing. Another is that he created man direct, without the aid of any intervening, natural causation, and unrelated to the animal world in origin. God the creator remains external to this world and superior to it, while he runs it and sustains it by his will direct and uses it for the benefit of the man whom he has created. In so doing he frequently resorts to the use of miracles. This teaching, being revealed truth, is absolutely binding and must be believed if men would find salvation.

But while these accepted beliefs remained static for years, the growing human mind was discovering and amassing much new knowledge which conflicted with them. The geologist discovered evidence which pointed to a greater antiquity of this natural world than Ussher's date of 4004 B.C. declared to be the fact in the matter. Then came the formulation of such generalizations as the conservation of matter and energy which conflicted with the teaching concerning creation. Then the philosophical background of thinking changed from individualism to universalism, carrying with it the practical abandonment of the atomic theory. The conception of law expanded into the generalizations, the postulates of the uniformity of nature and the rationality of the universe. Then the scientific thinking settled quite firmly upon nature as the

great fundamental reality. This conclusion completed the clash by eliminating the need of any such hypothesis as God.

Then arose the tendency toward compromise. The general position was taken that science and religion are not enemies and would never seem to be if each would keep to its own domain and do its distinctive work. The right-thinking man could hold the conclusions and theories of both science and the religious teachers and feel no sense of disharmony. But far-seeing thinkers perceived that this effort at harmonization of a real duality was too superficial, for science was becoming science-theology and was assuming the air of dogmatic authority.

Then came the rebirth of the idea of evolution—organic evolution. The immediate cause seems to have been the observation by Darwin of selective breeding employed by horsemen. The survival of the fittest he then conjectured proved the theory of organic evolution. Since his day his proof has been quite generally rejected but the theory he brought into modern thinking has lived on.

The modern statement then of the theory is that the world in which we live, organic and inorganic, is not static but the result of natural processes working throughout the ages. Present forms of plants, animals, men are the lineal descendants of ancestors, on the whole somewhat simpler, and these are descended from forms yet simpler extending back to the infinite beginning. Selections of beginnings range from the firemist, protoplasm, the planetesimal theory to substance or God-substance.

The working principles or ideas of the theory are: the universe, organic and inorganic, has had a history which

may be fairly clearly written; this may be written of the past on the basis of the knowledge of the present; the facts, principles, conclusions, postulates, laws of science are the data for compiling this history; the universe is organically related; change, orderly and progressive rules; there has been and will continue to be this orderly continuous eternal change; each new thing arises naturally and organically out of its precedent cause; different species of animals and plants were not created as different types but they have gradually changed by a progressive modification until each existing species is the last surviving branch or twig on the biological tree; the movement of evolution is in the main not cyclical but in a straight line; the symbolical figure, "the web of life," is the best description we can employ; the evolutionary process, while orderly and continuous and without any breaks, yet reveals variety in the movement; the purpose in this world-process must be sought in itself and not external to itself. There are no breaks or special introductions into this all-embracing system; in general, the evolution is from the lower and simpler to the higher and more complex; this evolutionary history embraces the story of the origin and development of everything, of the physical world, plant and animal life, human life, society, morality, idealism, politics, literature, beliefs, religion; evolution is the universal explanation of all things.

The mode of introduction of the theory has been to assume its validity and then proceed to prove it so that it might advance from theory to fact. Darwin thought he had produced sufficient proof. Since then the prooftext method of selecting usable data has been followed and the

conclusion arrived at is that it works. This pragmatic argument seems to be considered sufficient. The fact is that the comprehensiveness of the theory, its apparent simplicity, the richer view of nature it gives, the lack of any clear distinction between evolution and relation, and the note of certainty with which it has been proclaimed, have given it such wide acceptance that proof is not necessary. The growing literalism of our day has not been critical.

There is, however, now a change of feeling. The dogmatic spirit of certain science leaders has prejudiced decidedly their claim to leadership. The extremes to which the science-theologians have gone with their teachings of science and evolution has compelled even those of liberal tendencies to become critical. The manifest ignorance of many of these would-be philosophers and theologians of philosophy and religion has aroused to action not only philosophers but even certain men of science themselves. Then the manifest results of the religion of science are becoming so clearly visible, especially in the influence upon the student outlook, that a critical examination of this theory is necessary.

To begin with, let us clear away some of the accretions with which exuberance and sentimentality have overloaded the theory. Evolution is a theory and not a fact. It did not come out of heaven on a silver platter but according to its own teaching is the product of itself, for it arose at a definite time and out of definite historical conditions. The capital E-volution, the product of the hypostasis of an abstraction, is the work of over-zealous friends. It is not so perfect as to be standardized because there are varieties of evolutionists. Being a theory it cannot with fairness

be said to teach the varieties of teachings ascribed to it. It is not science but speculation based upon certain observations of nature and man and certain metaphysical dogmas and assumptions. It is the scientist, advanced from practical labor into the realm of "thinking," working with mental concepts instead of with the needle and the test-tube.

Some general criticisms may be first summarized. The law of evolution cannot take account of good or bad, high or low. It does not describe or explain the method of change of one species to another. It gives no adequate explanation of how or why each type has maintained its continued existence. To say that the possession of certain attributes has given an organism advantage over its competitors is an argument after the fact and really says nothing. There is no universal law that simple types change to complex ones, as the observed knowledge of microbes and bacilli proves. The different theories of the cause of evolution throw the whole thinking into confusion. There is no scientific basis for calling complexity of function a higher form of life. This is subjective interpretation and not objective observation.

The theory would make evolution absolutely continuous, yet it has its breaks. There is, on one side, the non-moral development of the universe which is continuous, while within this or related to it is the moral evolution terminating in man. The effort to avoid inconsistency or the use of a miracle, by depositing morality in the inorganic and mechanical sides of the universe is a device of little moment. This break from the mechanical, fixed, necessary, continuous evolution to the evolution which terminates in

man has never been successfully coped with. As a matter of fact, most evolutionists deal with two differing evolutions. The one is ceaseless, continuous and creative, while the other has terminated in man. Or, from another angle, the one is a course marked by eternal struggle and conflict, in which there is "death to the vanquished and to the victor life's bitter spoils," while the other is a "process of more and more effective coöperation."

The entrance of the scientist into the new field of theory and speculation naturally created a new "universe of discourse." The generalization that the present is the legitimate child of the past and will be the legitimate mother of the future is simple and comprehensive; but its mental workability demands a restatement in more definite scientific terminology. This need is met by the use of the terms organism and organic. Some speak of mechanical organism, which is too manifest an absurdity to be considered. The symbol organism which is applicable, for example, to the human body, by reasoning from analogy, is extended to cover the universe. If then the whole universe is an organism, in which every part is organically related to every other and to the whole, the mental framework for evolution is constructed. If, on the other hand, the analogy is not well chosen, the theory is crippled at its very inception.

How far may this analogy be applied? The numan body as an organism is a part of the world and it is always dangerous reasoning to proceed from the part to the whole. The argument from analogy demands initial likeness, but this one fails utterly when the mechanical, the inorganic and the freedom phases of the universe are to be considered.

The symbol organism may apply in the field of the origin of species, but there arises considerable strain when a valid place is sought for it in consideration of changes in the solar system. The strain is likewise severe when application is made to changes in the world where the human mind and will change and construct in obedience to a desired end. Likewise when application is made to mechanisms.

There is no *ideal* organism. Reasoning by analogy usually overlooks this fact and proceeds as though there were. The process selects one or more attributes or qualities of a certain organism and then etherealizes or attenuates the attribute so as to effect easy workability. This is a convenient method in system-making and has its legitimate uses. But in the case of the theory of evolution the limitations are not heeded. Here the organism is idealized to cover the whole variegated universe.

In the use of this symbol distinction is not clearly made between the universe as an organism and the organic phases of the universe. The facts of interrelation, interdependence, contiguous interaction may be discovered in the study of organisms, and also of some mechanisms; but these observations can be made only when we are viewing this phase of the universe. From another angle action at a distance is observable. Science also speaks of inertia, of a mass of dead things which are only acted upon. Thus observation of a phase is falsely given as a fact concerning the whole.

All the points in the analogy are not used, yet the application of the symbol is made to the universe. There are those who see, for example in the case of the human body, that there is a purpose evident in its existence and also

that we use it to serve our own conscious ends. The analogy here points plainly to the divine mind which uses this physical world to serve a divine end, and shapes the body to fulfill its purposes. This application the evolutionists not only overlook but deny the validity thereof. To them matter is eternal, and the physical world self-existent with motion and development entirely from within. Some thinkers try to maintain purpose and God while holding to these fundamentals and seek to find a place within the selfmoving world for both. When, however, we look for either they are but chimeras of the imagination.

The critical examination then of the use of this analogy reveals the fact, that the same organism in the hands of different thinkers can be used to argue by analogy, exactly opposite views. This shows that the theory of organic evolution, while applicable to some phases of the universe cannot be extended to cover all. What evolutionary thinkers really use in their thinking is the fact, that a universe to be such must on the side of its changes and variety reveal interrelation. Hence it is the idea, relation, rather than organism which is used.

The theory of evolution makes much more use, however, of metaphysical concepts than it does of this analogy. The basal one is matter. Much thinking has been done in the effort to define the constitution of matter. Matter or substance is the final reality—the world stuff. It is eternal. It changes but with neither loss nor gain. The theory of evolution then deals with this unchanging reality, which is, however, present in all changes. This fundamental reality is the changeless as to quantity in the midst of the continuous, eternal, creative evolution.

It will be apparent at once that the character of the definition of this fundamental reality will determine the character of the conclusions reached and of the theory of evolution based thereupon. When defined as material the logical outcome is materialism, as seen in Haeckel. If defined as mere seeming while mind or spirit is the fundamental, then the outcome is Berkleyian idealism. If an effort is made to straddle and it be called God-substance, then we have a Bergsonian vitalism which has been judged both materialism and idealism. The one fact that seems clear to many thinkers is that the natural goal of the evolutionist is materialism as long as the eternal constitution of matter is maintained. The efforts of these modern writers to refute this fact seem to establish it all the more firmly.

Not all evolutionists, however, engage in this task of characterizing the ultimate reality. They are content to trace a line back from present complexity to more primitive simplicity and then back into the unknown. Science it is claimed covers the knowledge of all that is known but beyond lies this unknown. There is no possibility either that this can be known though men may continue to speculate. Speculations, however, do not affect the truth of evolution.

In this reasoning there is a fatal weakness. It is an illustration of the method of system-making by reduction. All thinking aims at simplification and seeks to arrive at concepts so general that a multitude of details may be conveniently subsumed and related under and to one such general. Thus the law of gravity is a convenient generalization. But this process of thought takes on a peculiar

form by times. A general concept is declared and this general is then defended by the process of reducing either to insignificance or to something else everything in the universe. In philosophy we observe the absolute idealist reducing the physical world to a shadow so that he may maintain his view of the universe. In modern thinking we meet the thesis that society is the enduring reality and accordingly the individual is reduced to the shadow; or the individual is this eternal reality and society is reduced to the chimera; or instinct is the real, hence intellect is secondary; in short, practically everything to-day from idealism, morality, religion and man himself is reduced to fit a view of the world with its special definitions of the real.

The fatal weakness then of this theory of evolution is that the general to which all things is reduced is either an undifferentiated something or the unknown. With such a general the lines running back through an indefinite period of organic evolution, physical, mental, social or what-not, can all find a common melting place—in the unknown. Evolution can then be named the science of sciences or the queen of the sciences. But such a system can hardly advance knowledge. In reality it tends toward the static rather than the progressive in thinking, because of its blasé generality and over-simplicity.

The use of the idea evolution now dominates all the sciences and practically all thinking on any subject. Beginning in geology, the use of the idea spread to biology and since to society, morality and religion. The use of the idea leads to the effort to find some undifferentiated original out of which by the laws of evolution has evolved the

present form. Geology has selected the firemist, biology the protoplasm, while other sciences select instinct, self-preservation, fear or other originals. There is therefore to-day a specific habit of mind fostered and developed by this idea evolution.

This search for and selection of originals is at best a very venturesome task. When geology selects the firemist, three other selections are possible according to the ancient philosophers. Earth, air or water could be chosen and a good theory built up. The process of reducing could be applied from water to fire as well as from fire to water. The fact is, that by the same process of reasoning anything in the universe could be the original.

It must be observed further that when this original is fixed upon, both it and its evolved product or descendant are now actually present to the mind. Protoplasm and the highest form of life evolved out of it are both present now at this present moment. The reasoning then, in order to get in an orderly succession must introduce length of time within present time—a rather developed sleight-of-hand ability. No unknown or earlier original is ever selected to head the succession to the present.

This reveals the fact that the elements or factors which are arranged in this evolutionary order are all present both at the beginning and at the end of the process. Reference to more original, unknown forms contributes nothing to the argument. As far as the process is concerned, if we eliminated the judgment higher-lower a successive order leading from highly differentiated to the simpler could just as logically be executed. This would point to the fact then that the main point in evolution is not the successive,

orderly arrangement but the judgment higher-lower. This latter can be made and no violence be done to time.

The conception of an eternal, undifferentiated, original or primal reality which is the abiding reality amid the changes is one which cannot be fitted into a rational universe. It allows of no real distinctions among the phenomena of the world. It is a conception based upon identity rather than upon unity amid diversity. To reduce the universe to such undifferentiated identity is to negate it. It is pantheism and subject to all its limitations and inconsistencies.

There is a symbol used in the process of evolutionary thinking which alone limits the process before it begins. It is the symbol of the straight line. All evolutionary theorists reject the symbol of the circle. Effort is made to conceive of time as successive, independent units, and change, as continuous succession from an infinite beginning towards an infinite end. The history of the world and the present forms beginning with the earliest times is constructed as though following this straight line of evolutionary change.

Here again arises the natural necessity of reasoning by the use of symbols. The two which present possibilities of usefulness in this connection are the straight line and the circle. The latter presents many opportunities for increasing knowledge when reasoning is done from analogy. The cycle of water—steam—vapor—cloud—water is the familiar one. But everywhere in nature and life is the cycle form observable. Seeds become trees of their own kind and then seeds again. Human life passes from child-hood through the cycle back again to dependence. The

history of nations shows the movement from city-state, through kingdom and empire back to its point of beginning. The circle is also the only symbol we have for conceiving of the infinite in space and the eternal in time. The uses of this symbol for philosophy have been and still are many.

What then are the possible uses of the straight line symbol? It can be used, first of all, only, by conceiving of an infinite beginning and an infinite end which seems to be an impossible task. Such an expression as infinite beginning is a self-contradiction. The use still further implies a quantitative conception of time as though moments could be strung on a string like marbles. It implies the possibility of making an abstraction a separation—as in the case of the selection of the firemist. This has to be treated as separated from its relations so that its contemporaries may be arranged in consecutive order.

Other difficulties also appear. The old question concerning the priority of the hen or the egg applies with equal force to the protoplasm or the higher animal life. If evolution is from an absolute, eternal matter or substance along the straight line, then it never can be what it was at the beginning. Either the original is taken up in the appearance, which then is the real or the phenomena we know are chimera and science is impossible. If it changes it cannot remain itself along the straight line, if change means anything. A thing cannot both change and not change at one and the same time. The only possible conception here is that of the whole universe in process of change moving along a straight line—an imagination hardly worthy of presentation.

Then the symbol involves a conception of growth based

upon the quantitative idea of accretion. The straight line moves through numerical quantities and if there is evolution towards a higher there must be increase. Now it is possible to enumerate the organs or parts of organisms and arrange a sequence from one onward as mathematics determines. But these conceptions fail utterly when applied to the evolution of knowledge.

Knowledge does not wholly proceed from the part to the whole nor is it the product of quantitative accretion. The single statement to the point here is that we do not learn to see space little by little. The child's space is as great as the man's, namely, whole-space. To know is to know the whole world. Nothing absolutely new could ever come into knowledge because to be known it must at least have spacial and temporal qualities. Space and time are whole ideas. What we call new knowledge is our growth in the understanding of our knowledge of wholeness. This is the distinction so well phrased by Hocking between idea and idea of idea. This growth moreover is not in a straight line but comes by moving out in all directions round the circle from the idea. There is a suggestion here of why the child often knows more about religion than the highly educated man; he sees religion in its wholeness while the latter too often loses sight of this wholeness in the multitude of his ideas about the idea.

This symbol further lands the evolutionist in a serious quandary when he has arranged his sequences along the straight line leading up to man. At this point he can hardly stop and he can with difficulty go on. To claim that evolution has reached a goal in the individual and that henceforth there is no further advance involves the return

to the cycle symbol. The individual according to the theory must inevitably sink back into the pit whence he was evolved or be lost in society, which eventually will meet the same fate. This phase of the thinking abandons completely the straight line symbol.

If again this symbol be of value and the idea universe or organic world be maintained, then each stage or forward step should be taken up into its successor like the dissolving moving pictures. Eliza crossing the cakes of ice should be able not only to step from one cake of ice to the other but take along the last with her at each step or dissolve it in the next. This thinking in its plainness is the endeavor to move and stand still at the same time. The observance of these facts must be the reason why some recent evolutionists have come out boldly and declared that the only real evolution is in quality. This, however, abandons the main fundamentals upon which the theory was founded. It is doubtless nearer truth.

But it is said that, irrespective of the metaphysics of the matter, given the protoplasm the world of life can be evolved. So if we take a flower and knew it altogether we would know the universe. The criticism here is not of the work of the scientist who studies life in its various forms and has given us what we know both of individual organisms and of likenesses between different genus and species. What we can rightly question is the conclusions which are based not on scientific evidence but upon certain metaphysical doctrines. Likeness as observed is not identity. Likeness does not necessarily argue evolution. The dependence of consciousness upon the brain no more argues its evolution from the brain than vice versa the brain is

evolved out of consciousness. That man has his animal side and as body resembles other animals is not sufficient evidence to argue the evolution of the soul or conscious judgment of values out of a lower animal form. This is the fallacy of reduction again.

This suggests one of the practical criticisms of the mold of thinking engendered. It is that the focussing of the eye upon the past and upon the lower, works havoc with the judgment of values and the exercise of the idealistic potentialities of the human being. It is a very questionable policy, when one would know an organism to select the lowest and poorest specimen for study. It is also much worse to evaluate the higher by the lower. Granted that the bacon we ate for breakfast this morning was but yesterday a dirty pig it was nevertheless excellent bacon. It is a fact observable on every hand that this mode of thinking has lowered the ideals and morality of our time. For if the original and primal be the real, then how can the logical conclusion be escaped that evolution is either playwork or a disaster? If evolution be progressive, then the highest is the standard and not the lowest. If there is progress there must be real change, hence the lower cannot in any true sense measure the higher. But the aboriginal and germinal is not necessarily the more real. There is no more or less in the reality of reality.

This evolutionary thinking has for most men come out into the open in the view of man it propounds. The main point is not whether mankind came originally from a single pair or was spawned like larvæ, nor is it our simian ancestry. It is that man is a derived and therefore secondary product. The only reality in man, as one often quoted

above declares, is the germ cells composing his body. As an individual he now has reached the zenith of evolution, so must pass. This is his destiny to pass into oblivion since he has been thrown up out of the evolving mass at a point in time, hence is secondary in value.

This, let it be observed, is the logical conclusion of a metaphysics of matter—the germ-cell theory. It is a philosophy of pessimism. It is rejected by that inner judgment of man which rejects for example such teachings as that God has selected a certain number for salvation and the rest of mankind for eternal damnation. It is self-suicidal reasoning and self-deceptive because clothed in the glamor of truth. It is the mind of man taking pleasure in its self-reduction. It is greatness robbing itself of its own grandeur.

Such conclusions, however, are not necessary. There is a view of both the physical world and man which does not require this tandem formation nor this reduction of one to the other. It is moreover the best which always judges the poorest and not vice-versa. Man is the measure of all things, even the physical world. To reduce the dignity, the glory and the immortality of man to germ-cell eternity is to cut the nerve of progress, destroy civilization, open the door for all the animal traits and introduce the beast-like struggle which terminates in the survival of the strongest. It would set back the clock of progress many thousand years.

This is of course not argument ad hominem but ad metaphysic-em. It would be merely matching dogma with dogma were the former the case. The argument is that these pessimistic and destructive conclusions are based

upon a metaphysic which does not and cannot do justice to the facts concerning man and life. It is materialism or naturalism.

Evolution never properly completes itself. Continuous change or creative evolution leaves the thinking suspended in mid-air. To what purpose is endless, ceaseless, creative evolution? Perpetual motion is in reality static, so is this not a denial of itself? It is a denial of reason for the highest form of rationality is the judgment of value. If this ceaseless activity is mere activity, then it is nothing. What seems to be the best note that has come out of the interpretations or teachings of evolution is that in reality there is evolution only in quality.

This conception presents many possibilities. It will imply the view of change as kaleidoscopic whence qualitative progress is possible. It will avoid the error that materialistic change or quantitative change is ever progress. Mere change, if there be such, from the simple to the undifferentiated is not progress, unless the change be related to a judgment of value or approach an already realized ideal end. Change that is not for something and to serve some definite end is not progress. It will thus relate change to the changeless and give a place for values and reason in the system. It gives room for the conception of the conservation of matter, that is, the physical side of the universe, but not for the absoluteness as implied in the metaphysics of evolution. The physical or material is one phase of reality of which the other is described by the term spiritual or personal. By thus omitting the isolated absoluteness of the physical world, and the over-emphasis upon

the material aspects of time and space, a theory of qualitative evolution is made possible.

Such a theory could illuminate and systematize many of the observed facts of life. There is a development in the physical history of man from a small beginning to maturity, but then comes decline. Here is the cycle from dust to dust. But there is also another development of the mind and of the soul. The mental is the understanding of the knowledge of wholeness which increases but can never be complete until it arrives at full comprehension. The soul development is that qualitative side of knowledge where judgments are made on the basis of eternal values. The personality is measured by the quality of these judgments and the will to attain unto the values. There is a distinctive evolution from the "natural to the spiritual," that is, from the lower self-quality to the higher. This is possible only because there is a higher towards which we may daily move. In the language of Christian theology, there is a birth called natural and there is a birth which is "from above." In this latter the Other World is given as a whole but not the full understanding thereof. There is then a qualitative evolution leading up to the time when men shall see Him and be like Him.

Civilization is likewise qualitative evolution toward a definite end. This progress comes through struggle and conflict but is not mere struggle and conflict. It is not an evolution distinct from that of individual men but a part of this latter development. The evolution proceeds not in a straight line but through cycles with the constantly upward trend. Civilization is social relationship qualified through the individual outreach for the ideal. This ideal

will be the kingship of God within men on earth and its higher complement when anticipation becomes realization.

It is strenuously argued that evolution is not atheistic and does not lead either to materialism or to pessimism. This contention, however, does not agree with some of the facts already noted. It is difficult to see how the dogma of the absoluteness of matter can lead anywhere but into materialism. The philosophy of vitalism does not relieve the situation. The derived nature and the destiny of man as pictured is pessimism. The explanation of God really explains him away. The main point in the contention, however, is that some certain devotees of the theory do not think themselves either atheists or materialists. Some Stoics achieved noble character, despite the fact that the doctrine of self-sufficiency has been shown to be impossible for mankind in general. Stoicism to many others led to That there are men who can view with courage and complacency their life as wholly temporal and their destiny as the continuity of the germ-cells making up their physical body is a possibility. But such a courage and view of life must never be confused with religion. Such views will never lead the mass of mankind anywhere but into pessimism and atheism.

CHAPTER EIGHT

THE TEACHINGS OF EVOLUTION

The expression used as the heading for this chapter is now a familiar one. It is evident that the main interest to-day in evolution centers round the teachings. There is no longer need to prove the theory, so it is claimed, hence the next logical task is to draw the conclusions and inferences. This is logical also because the conception of religion held by evolutionists is that it is emotion plus a set of intellectual beliefs and dogmas. Over against these emotionally-born beliefs must now be placed the rational teachings of truth, that is, of evolution.

The teachings may be summarized under the following heads: creation; progress; man; society; morality; religion; evil; revelation; miracles; freedom; purpose; God. The claim is that the teachings of evolution concerning these subjects present a religion which can be religion and at the same time rational.

A problem rises at the outset concerning the possibility of a rational religion from the evolutionary standpoint. Rationality or reason and religion are by all evolutionary writers defined as incommensurables or as belonging to different orders. Reason and religion have each an independent ancestry and developmental history. The lack of any necessary relation is fully emphasized. A man may have religion according to Thompson if he happens to have the emotion; but if he does not happen to be so fortunately

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endowed, he can get along very well with science in its place. By others the statement is made that science and religion, strictly speaking, deal with different subjects: science with knowledge, religion with faith. How then can knowledge and faith, reason and emotion be merged into a rational faith?

The process by which this is accomplished is an interesting one. Since reason and emotion are incommensurables, a go-between must be discovered or invented if they are ever to come together. This is ingeniously invented in the distinction made between intellect and reason. Emotion, it is claimed, has an intellectual component which is the source of the dogmas and teachings of theology. It thus touches in its teachings such subjects as the creation of the world with which reason deals. A point of contact is then established where reason can correct emotional teachings and provide a rational theology.

This contact is made in still another ingenious way. It is declared that religious teachings are based upon human needs and desires, hence faith and its intellectual expression are the product of desire. In religion men believe what they desire to believe. Desire then uses symbols in its expression of itself which secures a certain satisfaction of reason. Here therefore a point of contact is made between reason and emotion through the use of symbol. Moreover reason controls desire, hence there may be a rational faith.

Still another way is revealed in the frequent claim that, "Where science ends faith begins." This is a tandem relation which makes religion nothing but a cook-book of left-overs. When science and reason have explored and ex-

plained all that can be known, then men may guess, speculate, become mystic or have faith—as long as nothing is ever declared. For the moment a declaration of faith is made it comes within the realm of knowledge, hence is out of its own realm. Men may have faith as long as it is mystic emotion and harmless. On this ground many men of science make bold claims that they also have faith.

It will be admitted that much intellectual ingenuity has been expended in this effort to get across an imaginary chasm. As noted above, there is no such absolute separation between reason and emotion. Reason, moreover, is much more than the process of abstract thinking. The tandem sequence, emotion—intellect—reason is a pure fiction of the imagination, the product of a mode of thinking which must arrange sequences. Then again religion, as seen in any historical illustration, reveals more of reason than emotion. Human thinking makes use of symbols, but reason is not divided within itself and does not need to create something to establish its own unity. Rationality is not a separate power of the mind but a phase of expression, just as emotion and will are phases.

Moreover faith is not blind emotion, believing "what you know tain't so." Faith is the substance of things hoped for, the evidence of things not seen. It is evidence of the highest type of rationality. We walk by faith and not by sight, that is, we live and shape our life according to what the inner eye sees and not the outer, and certainly not what emotion commends. No man sees optimism with the outer eye yet he sees it so clearly that he makes it a controlling factor in his life. No man sees sacrifice with the outer eye. This is always an inner conception and judgment. Neither

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is the eating this or that, much or little, nor the fact of death in itself sacrifice. By faith, that is, seeing from within sacrifice and its value, we measure and give value to certain actions. Moreover there is no real sacrifice except in the conscious preference of a higher value for a lower and the paying of the price for the higher. So it is with human life. Things seen are temporal while the things that are not physically seen are eternal. And this vision is not emotion—it is the supreme reason. There is no faith without this higher knowledge.

The uselessness of this wasted ingenuity is its outstanding characteristic. This is seen beyond the gratuitous problem of trying to cross an imaginary chasm, that between reason and emotion. The plain fact in the whole matter is the claim that the evolutionary teachings are superior to those of orthodox theology. Instead of stating these teachings and the metaphysical bases upon which they rest and leaving them to their fate, it seems necessary to attempt to forestall all criticism by this appeal to the identity of science and reason and the abstract definition of reason. The very rashness and dogmatic temper here revealed, when clearly seen, closes the discussion.

That all these explanations and harmonizations are needless is revealed by Conklin. He, too, practically covers the ground outlined above but when he passes into the discussion of another topic he straightway forgets it all. "The various stages and phases of religion represent different attitudes of mind toward the fundamental problems of existence, such as the origin and government of the universe, the constitution and order of nature, the origin and character of man and of society, and especially the mysteries of

human life and death, of good and evil, of instincts, emotions, intelligence, and consciousness, as well as the aspirations and ideals of individuals and of society. The type of religion which one holds is the reflection of his beliefs regarding these fundamental things." Here there is no more reference to contraries or to emotion but religion is an attitude of the mind toward problems of thinking and believing. Beliefs too are the product of the reasoning. The only real difference between Professor Conklin's beliefs and those of an orthodox theologian is that the former thinks his the more rational. Distinction is not of kind but of quality. Both think on the same problem but being human, and following different lines, each arrives at a somewhat different conclusion.

This is of course the real situation: Which religion is the more rational, the religion of science or the other religions of the day? It would be more scientific, undogmatic and fair to state the case as it is, and omit throwing dust into the eyes of the man on the street, specially, by making such unfounded claims as outlined above.

What then is the superior rationality of the teachings of evolution? Does this religion of science make it possible for a man to be religious and rational at the same time? Rationality means the three things: logicality, purpose, value. How will these teachings stand these critical tests?

The conception and definition of religion itself may be considered first. We will pass by attempts at genetic history and take the one definition given above. This is the view that makes religion a personal matter and sees it as a set of intellectual beliefs.

Reflection upon this view makes religion a matter of in-

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tellect rather than of emotion which approaches nearer to truth. That each man is responsible for his religious welfare and not dependent upon his heredity, environment or society is one of the basal teachings of evolution since the individual is now passing and society is to take his place. On this ground religion has passed its zenith with the passing of the individual, since society cannot reveal or possess individual religion.

There is also a dilemma in the situation. The individual must stand or fall alone, dependent upon the quality of his thinking and his relation to his beliefs. On the other hand, if he trusts his own judgment he is doomed to disaster, for only by losing his own judgment does he find the true one. We must have our individual view of the universe and yet we dare not rely upon it. The point is that individual judgment often means taking the measure of the universe and God by the pint cup of our scientific laws, metaphysical entities, narrow beliefs and dogmas. That is not man, but undeveloped man—the measure of all This is why some theologies have to go because they are too shortsighted and shallow. On the other hand, while we can have no judgment but our own we can escape narrowness. He who wills to know shall know. The real greatness of man is seen in his willingness to bow down to a greater. The profound truth here is, that he who hath God hath all things. Men create their beliefs concerning God but God creates men. The Christian man improves his judgments and finds quality when he seeks first the wisdom and companionship of Jesus of Nazareth. Jesus takes the measure of men and of institutions. Ten Commandments judge men and not vice-versa.

There is also a certain peculiar quality to religious believing or faith which differentiates it from the holding of a belief as truth. This is the difference between science or philosophy and religion. The origin and destiny of man may become the object of investigation for all of these three, but the results or knowledge gained will be received by religion with an added vital interest. The philosophical or scientific mind is satisfied with the attainment of what is conceived to be truth; but to religion there is an additional evaluation since eternal life or death is in the balance.

This is saying that religious values supersede the attainment of truth. There is a special and unique evaluation by religion of both science and philosophy, a fearless, bold evaluation. The basis for it is, that companionship with the source of truth gives a standard of evaluation which is commanding. It is the judging of the truthfulness of This is why religion tires of logical systems and formulas and bursting these asunder moves in the freedom of companionship with the eternally free. This is why religious men reject the view that the mechanical and necessary phases of life express the all of real living. This is why religious men, when the ideal demands it, buffet the body, choose pain instead of pleasure, save apparently useless lives and shoot down men in the prime of life. is why religion has never been and never can be caught and pressed into an intellectual system: it is fundamentally radical. Religion judges individual, logical, scientific or philosophic truth.

There is thus more truth than guessed at in the statement that where science ends faith begins. But the truth

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is not in the meaning intended. The truth is that science, both as science and as science-philosophy rightly seeks truth. This search may extend to a view of the whole but here the intellectual beliefs find their terminus. Religion not only inspires efforts at rationalization and systematization but it embraces the whole within its consciousness and evaluates all science or philosophy can propose. It does not question the truth within the field of the scientist but evaluates it. It takes a personal attitude toward the whole and this judges all things. Religion thus has the last word but in another sense it also has the first.

Intellectual beliefs do not come by mere thinking nor are they fully evaluated by reasoning in the scientific sense. Religion itself is a productive source and creator of beliefs and knowledge. Religion gave birth to science and philosophy and maintains the conditions for their prosperity. Religion tames the animal passions and creates a social life, in which the ever-present urge of the how and the why of things and of life may find its exercise and satisfaction. Religion being from one angle the consciousness of the Other World as a whole, is constantly producing original knowledge and calling forth beliefs. This is sometimes called experience; but what experience can a conscious being have that is not conscious? The confusion is often introduced here between the idea of the whole and our ideas of this idea. No man has ever had a religious experience in which there were no religious ideas. Religion is thus a producer of ideas which become the subject of intellectual heliefs.

The evolutionary view of religion is thus too narrow. If religion were but each individual's personal views of na-

ture, the government of the universe, the origin of man and such fundamental problems of existence, then, of course, a man could think his religion was truly rational. But this is too simple a statement of the case. Religion is of man not primarily of men. Religion is universal and not individual. Each man finds religion, not by the exercise of his narrow reasoning but by being obedient to the higher call. A man may have logically true, scientifically true, and philosophically true views on these fundamental problems and yet have no religious view nor be religious. Thinking alone is not religious. Thinking even on God may not be religious thinking. It is possible to hold true views of God and not be religious. This definition and view of religion is thus so narrow that it could miss religion altogether. This conclusion is intensified by noting that the purpose phase of reason is only lightly touched on, while the value phase in the light of consciousness of the whole is entirely omitted.

The teachings concerning God, naturally, should find a central place in any religion. Evolutionary doctrines are both negative and positive. The conceptions negatived are the usual ones, that God is the creator and ruler of the universe, is supernatural, and manipulates the laws of the universe according to his will. There is no such Being as this who existed before the world and man was created, who created the world out of nothing, then created man by direct action and now manipulates the universe for his good. The doctrines of the eternal conservation of matter and of energy with that of the universality of natural law forbid acceptance of these beliefs. The correction of be-

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liefs, however, does not necessarily mean disbelief in that which is symbolized by the word "God."

The positive side of the teachings begins with the evolutionary genesis of any belief in God. The beginning for evolution is the most simple, original, primal world-stuff or form of life. By the laws of nature and evolution, in the course of time appeared man as an animal, then consciousness developed, then out of emotion with its intellectual component rose religion with the idea God. Thus God is not the omnipresent, omnipotent, omniscient Being of independent existence, for his existence is related to the evolved emotion and belief. Reason may correct and rationalize the intellectual belief but it finds no such independent existence. There can be but one primal Reality and that is nature: hence God must be related to belief.

The word "God" is thus a symbol, but of what? Of an object of metaphysical speculation. Since science covers the known universe, what lies beyond cannot ever be known, but we may amuse ourselves with speculations. God is thus at home in the realm of the unknown and of speculation. On this basis the science-theologian can say that evolution neither affirms nor denies the existence of God. Quite true. This is the usual teaching, but a new turn has been given to the thinking recently. This sort of a transcendental Deity cannot be immanent and modern thinking is turning towards this view. Hence the new teaching of evolution is that "God is in nature, the reason in all national law, the purpose in all natural processes, the supreme mind and will of the universe."

This seems to be a fair exposition of the teachings. What sort of a God—if there be any such Being—is here

presented? There is a latent inconsistency to be noted first in the teaching. It is claimed that the evidences for the existence of a God stand quite apart from the truth or falsity of evolution, and this is evident. Evolution has all the certainty and truth of science and reason behind it, while the evidences for the existence of God are metaphysical. Evolution is based on the known, the belief in God on speculation concerning the unknown. Yet the belief in a God is one of the products of evolution.

The inconsistency here lies in two uses of the term evolu-The one is the conception of the process of change and transformation, according to which the present world, including our beliefs and ideas has come into existence. According to this process, not God but the belief in God has been evolved. The other conception is of evolution as a body of teachings, just as theology is so viewed. This conception is an abstract, ideal one, almost a personification, which, like a person, uses itself as subject matter to create an intellectual system. Thus, according to the first definition science, metaphysics, theology, are all the products of the process, while in the second the process has become rational judgment whereby science is established truth while theology is speculation. Cooley well asks, that this method, called the hypostasis of an abstraction be carefully guarded against. Such use of an abstraction far exceeds the limits of truth, scientific exactness or even fair play. It throws confusion into the whole argument and compels these evolutionary thinkers to both affirm and deny on the same page. It reveals the force of sentiment or desire where we would naturally expect scientific clarity and truthfulness.

It is only because of this duality in conception that an

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attempt can at all be made to save the thinking from the just criticism that it leads to atheism. As a matter of history, evolution two or three centuries ago was frankly atheistic, then it became agnostic while to-day Hudson judges its main contribution is skepticism. It is likewise a fact, that the logical outcome of the theory of the evolutionary origin of God denies to him any real existence. It is plain atheism, for it not only rejects modern views concerning God but reduces his existence to a belief or a speculation. Evolution finds no supreme personality in the universe and the efforts to save the theory do not save it.

One of these efforts is to make use of the difference between primary and secondary causes. Science, it is claimed, deals only with secondary causes. But the science that does this is the pure science and not the science-theology which here speaks. This latter deals with metaphysical entities and is quite entirely outside the field of pure science. Moreover, the distinction made between these two causes is made on the basis of time. There is time and there is infinity which lies back of phenomena, which, according to science-metaphysics is temporal and spacial. Just how infinity can be conceived of as chopped off and placed spacially, immediately behind the phenomena of time and space, requires a species of mental gymnastics beyond the known. But evolutionary thinking seems to have no difficulty with infinite beginnings finite universe or a limited infinity.

It is evidently the subconscious force of this inherent contradiction in the theory of evolution, which, with the force of external critical pressure has led to the new scientific exposition of the immanent God. God is in nature,

the reason, purpose, supreme mind and will. This teaching is decidedly a step in advance since it brings God out of the unknown into the known. He is now an object which science discovers, though this was denied. Science is no longer left with the choice of negation or affirmation,—it must affirm. The belief in God is therefore, not the product of desire but of reason, since science and reason are practically identical. The emotion theory is discarded. God must be related to reason. He is likewise discoverable since the world is knowable. It can no longer be said that man by searching cannot find out God. Since he is the reason in all natural law he can be known as natural law is known. Surely this is no atheistic doctrine. The theory of evolution is saved from its exposed vulnerability.

But does this not pay a heavy price in inconsistency? What is this reason hidden away in the mechanical phase of natural law? Reason is defined as the ability to create generalizations and do abstract thinking. Mechanisms do not think, organisms hardly generalize or think abstractly. Is the action in a mechanism rational? It is never so conceived. Of course the question of values cannot enter. There is no personal side to natural law; whence then reason? Reason, moreover, is declared to be the possession of the human being only, how then is it the possession of the mechanical or organic world? Reason as controlling, natural law is denied. How then grasp this conception of God as the reason in natural law? The only way possible is to think of a "shadowy concomitant," an attenuated aura, or some such metaphysical imagination. Men would surely acquire sublimated character by prayer and companionship with this spiritual attachment.

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A hint at a positive conception is given in the distinction between law and chance. On the basis of this distinction God is the stability and constancy in natural law. But the laws of nature are stable and constant, and while it is admitted that there is chance in the process of evolution this element is never given a place in the working of natural law. The law of gravity admits of no chance happenings, else would miracles occur which is an impossibility. Indirectly, this teaching makes a great confession and one hardly to be expected against the background of the description of natural law. It is that the faith we possess in the orderliness and constancy of the world in which we live is grounded not in law, but in God. This is the highest reason, because it is only in personality such a faith can be truly rooted and established. But it looks as if the God in natural law is not the God of Christian faith. For natural law is first established and then God is in some manner read into it. Natural law would, however, function just as well without this sentimental shadow.

The natural query presents itself whether this God is material or spiritual. If the latter, then the element of personality enters. If personality be present, then there is freedom of choice, direction and action in obedience to ideals. Is there anything of this nature in natural law? Not according to the description of law. The mechanical conceptions prevail. There is no freedom within natural law. The laws of nature, moreover, reveal none of the truly human or divine qualities since they are inexorable and unfeeling. There is no forgiveness and there is no regard for goodness or evil. The rain falls on the just and on the unjust and pestilence makes no selections. The rose

smiles and smells as sweet on the bride's breast as on her bier. Where then is there anything spiritual in this conception? The thinking which would thus endeavor to save a theory from the pitfall of atheism does it the questionable service of making it reduce God to a refined materialistic shadow.

The God we know not only exists but does things. The belief in him creates character, improves social relations, moves men to build and achieve. To use familiar language the belief works. What does this God in natural law do? What influence has the belief in him or it upon character and civilization? There seems to come an exhilaration from conceiving of God as immanent, rather than as transcendental, or present only in the chance happenings in the natural world. But the exhibaration is the product of the conception of immanence and not of this immanent God. Modern thinking, under the spell of the full meaning of the word universe, feels bound to apply the qualification eternal both to the physical world and to God. The conception of the immanence of God is logical. But this thinking does not demand that God be reduced either to some materialistic essence or quality of matter. It states a problem in dualism which philosophy must meet. Continuing with the basal idea of universe, and beginning with human experience, a logical philosophy can be formulated in which these two phases of knowledge, the material and the spiritual, can each find its proper place and no violence be done to either. This result, however, comes not by the process of negation of an opponent in order to make the mental processes move more smoothly. It may be added

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that there is no such thing as immanent without the supernatural.

How well will the belief in this God work? There is a law, like God like people. What is there in the character of this God that men would grow like? God in the christian teaching is a Father and henceforth human fatherhood takes on superlative character. God loves all men and desires that men reveal this same love one toward another and the brotherhood of man becomes an ideal. Men observe that social relations approximate the ideal when lying, stealing and murder are absent. This observation, however, could never advance beyond the contract stage until men, in their fellowship with God come to know that these relations and ideals are not mere social contracts but qualities of character. God is true and has respect for human life. It is only when men hold this belief concerning their God that they themselves strive to achieve this character. So the belief in a forgiving but just God, a loving God, a moral God works in building up human character and producing men after God's own heart. The absence of any personal, human, or character-making qualities in this evolutionary God is the condemnation of the theory. The joy men find in nature, in gorgeous sunset or blazing autumn hedge is the product of the christian education and environment and not the working of this characterless nonentity, the evolutionary God.

It is therefore difficult to conclude otherwise than that the theory of evolution eliminates God as a real existence and personality. He is not the primal reality nor related to it, except in the far-off position of an evolved belief.

And beliefs are temporary and disappear. He bears no active nor vital relation to the universe. He could be eliminated as far as mechanical and organic evolution is concerned and the world go on as usual. "Mechanism, law and order are universal and have been so from all eternity." The efforts to soften down this logical and apparent conclusion only add confusion without enlightenment. They may try to save the theory from its goal, atheism, but the consequent pessimism is as great an evil. If this evolutionary teaching concerning God were to supplant the christian God for one generation, the observation that what took a thousand years to build can be destroyed in a day would find a new verification. The passionless splendor of time, fate, death, cannot take the place of the God of the universe.

CHAPTER NINE

EVOLUTION AND MAN

EVOLUTION has many teachings concerning man. Negatively speaking, it denies his special creation; the teaching that he is unrelated to other animals and the organic world; that he belongs to a kingdom by himself; that he is subject to any supernatural control which has the power to manipulate natural law for his benefit; that he holds a unique position in the universe; that he has freedom; that he is master of his destiny; that he never experienced a fall; that his behavior is determined by idealism; that he is immortal in the usual definition of human immortality.

The positive teachings make him a derived and secondary product of the evolutionary process. In due course of time the living organisms appeared of which protoplasm is the original specimen. Then by the laws of evolution plant and animal life appeared. From the amæba has come man by natural evolution and no interference from without. The laws which govern the animal world govern also human evolution. Mankind was originally spawned as larva and has not descended from an original pair. The process of evolution has carried man to a point where he is the highest animal. It has given him language, intellect, reason, morality and religion, all these gifts being developments according to evolutionary laws from primitive potentialities. The gift of language may be the immediate cause of this higher development or this end has been

achieved by the law of natural selection. Intelligence arose with the increasing complexity, structure and organization of the nervous system plus the capacity of profiting by experience. Reason, the ability to generalize and do abstract thinking is a special gift peculiar only to man. The moral sense is an instinct similar in nature and origin to other social instincts. Conscience is a modified instinct.

The phase of the teaching which arrests attention at once is that man is the highest product of evolution. "There is good reason to believe that no higher animal will ever appear upon the earth." Huxley declared that the laws of human evolution ceased to be operative when self-consciousness became developed in man. Conn believed that the laws of the evolution of animals and plants apply to human evolution, only up to a certain point, beyond which man has been under the influence of distinct laws of his own. Man thus occupies a unique position in that he is the terminal point of evolution and is the product of special evolutionary laws. Evolution, moreover, according to Conklin, disclaims any further responsibility for the future of man: this is now in his own hands.

This teaching carries with it the dual note of familiarity and of the unexpected. As orthodox theology it is familiar, because man is always given the place of superiority in creation and a place unique in the animal world. He is the real climax and end in creation. But as being the teaching of evolution this turn in the thinking comes as quite a distinct surprise. Evolution is creative and eternally continuous—how then can it come to a climax and place a period in its continuity? The laws of mechanics operate in the universe—how then comes this skip or break

in continuous mechanical action? The universe is organic; how then eliminate one part or atom from the organism and give it special treatment? The law of evolution is declared to be constant and unbreakable—whence then this change of mind and inconsistency? The reality in man is the germ-cell or the eternal substance—whence then this change of germ-cell which leaves behind the law of evolution and introduces new and different laws? Law is constant and uniform—whence then these two kinds independent and different in the same universe? Nature is uniform in action,—why this exception? Whence this selective taste in a world of nature controlled by mechanical laws?

What sort of a process is it that produces something greater and different than itself and then finds itself out of relation to its product? Surely this is a miracle of miracles! What further is to be the destiny of this new creation, which is in the universe and yet not a part of it, since the eternal creative evolution has declared man beyond the working of its laws? The teaching requires a heaven to complete itself. In fact evolution is hereby made to teach all the doctrines concerning man which it repudiates in other places.

There is but one answer to these queries, and it is not one of science but of history. It is the history of the movement of science away from science into metaphysics and then into a beclouded mass of divergent and conflicting theories and teachings. It is well known that scientists do not agree but among true scientists this is a sign of progress. Truth is discovered by test hypotheses. But when the science-theologians disagree it is a sign of conflicting dogmatisms, since the fight is over the teachings of science

or specially of evolution. The teachings depend for their validity not upon any established standards but upon the personal predilections of the scientific thinker.

The evidence for this judgment is immediately to hand. More, in his admirably clear exposition of the limitations of science, shows, by reference to a very wide survey of modern scientific literature, that men of science to-day have quite entirely forgotten what pure science is. Science he shows is made metaphysical and at the same time pretends to supplant metaphysics. It has created a sort of fictitious world in which the laws of objective or physical phenomena are inextricably confounded with the deductions of subjective psychology. Being himself a scientist and not a theologian, Professor More can use such terms as bigotry, idolatry, dogmatism, personal irritation, scientific polemic, and not be accused of having been brought up on a bottle.

In the case of the science-theologian the limitations are left still farther behind. Not only does he deal with metaphysical entities rather than scientific observations, but he advances to teachings. As is inevitable, there will thus appear about as many varieties of teachings as there are individuals, for, as is clearly observable, the type of the teaching depends upon the tendenz of the interpreter. One biologist says of his fellows: 2 "Modern biologists survey a particular phase of life through a particular mental facet and each school has evolved a more or less rigid formula for the things it most clearly sees." He further adds that "the precise methods of modern biologists . . .

^{1 &}quot;The Limitations of Science."

² Patten, "The Grand Strategy of Evolution."

have not clarified man's social problems, nor given us large pictures of the processes and products of evolution. It is clear that the historic, microscopic, telescopic and panoramic methods of nature study have their respective virtues as well as the defects of their qualities. . . . In their attempts to portray nature, biologists often forget the weakness of the one and fail to utilize the strength of the other."

This statement establishes the point. The teaching of the biologist depends upon whether he has abandoned the precise method of science for the freer philosophical and theological meditation, or upon the point of view concerning nature which he selects. Professor Patten certainly declares his freedom when he chooses to identify evolution with the forces of construction and coöperation in nature to the exclusion of all other forces or facts. By the same sort of individualism the teachings of evolution are now so many and varied and departure has been made from the original conception of it so far that over-enthusiastic teachers declare it is identical with revelation, being the real christianity.

When, however, these individualistic speculations and offerings are laid aside there still remains the original question of the bearing of the theory of evolution upon the problem of man. The relationship goes much deeper than a discussion of the literal interpretation or the so-called scientific interpretation of certain passages in the Bible presented by the science-theologian. The modern method of biblical interpretation, the literary and historical has banished the literalism which has pained biblical scholars as much if not more than men of science. Such dis-

cussions hardly belong to any study of the theory of evolution. The real question is as to the applicability to man of the general principle that the present is the legitimate child of the past and will be the legitimate mother of the future. How well does the principle work when applied to human beings, men, who consider themselves the masters of their own destiny and who, as free agents, shape their lives according to ideals?

It is evident that those who champion the theory feel that here is the crux of the whole situation. The workability runs smoothly when organisms are being dealt with, but the facts of conscious freedom and idealism present a serious snag. No wonder some evolutionists are ready to call the creation of consciousness the supreme blunder in the universe, while others seek to discover consciousness even in the inorganic elements of the universe. In order to achieve workability and thus prove the theory universal in application, strong emphasis must be placed upon the animal side of man and originals in lower forms of organic life must be found, out of which, by the working of the natural law of evolution, the human intellect, will, reason, passions such as love and hate, moral qualities of selfishness and unselfishness, and religion have been evolved.

The conviction may be stated that the theory breaks down quite completely at this point. The theory of evolution cannot account for man, explain man, nor compress him within its narrow limits. The mechanical side of the human body and the organic life may be related to these phases of the physical and organic sides of the universe. The human body runs like any machine, and on its organic side is subject to the laws of nature. The human body,

moreover, resembles that of the ape as those qualified to know declare. This body also returns to dust as do the bodies of all animals. Many of the actions of men and especially of the lower types resemble strongly those of animals. Between the higher animals such as the dog and the horse and man there seem to be many points of resemblance beyond their common animality, such as intelligence. Such facts come from observation and experiment. But when the theory goes beyond this it begins to find itself in serious difficulties. The main one is, that the theory which is at home and can find illustration in organic nature is by denotation and connotation limited to this phase of life and hence is not large enough to deal with man who is a spiritual being.

It must be admitted that the points of resemblance noted between man as a physical being and other animals would naturally suggest further study along these lines. It would be interesting to try to arrange a sequence of animal structure beginning with a simpler form and ending with man even though all the links cannot yet be systematically forged. The boundaries of human knowledge are enlarged when groups in the animal world with marked likenesses are built up. Science has here a vast and legitimate field for exploration and the opportunity to do mankind a great service. But there are dangers and temptations which lie before the investigator.

These are now familiar ones but familiarity does not excuse them. One is to mistake likeness for identity. Animal likeness is not really animal identity, much less spiritual identity. If animals think and have ideals all the better for the animal: but we do not know it. If any

of them are ever transformed into men, the honor will be theirs; but men will lose none of their dignity by the occurrence. But no animal ever has become a man as far as knowledge goes. If identity were to be established why not argue for it as men and not as animals? Why take the model for the identity from what we do not know as man.

Another danger is to define uniqueness as merely something higher. The term, higher, properly refers to degree and not difference in kind. The higher knowledge we may possess of space is not a higher degree of spatial knowledge. So the knowledge of our superiority to the animal is not a higher degree of animal knowledge. The uniqueness of man in the world of living beings is not merely a higher degree of what is embryonic or potential in all others, else there would be no uniqueness.

Still another danger is to cut the facts to suit the Procrustes bed of evolutionary theory. Either the theory of evolution must remain where it belongs and be local, or the facts relative to human uniqueness and spirituality must be pressed in violently or otherwise. To overcome this dilemma nature on one hand has been endowed with all sorts of spiritual qualities and then on the other the spiritual side of man is reduced to an evolved product of some natural phenomenon. The universality of the theory is thus attained. But the nature thus pictured is some ideal creation and not the one we know. Then, further still the temptation to leave science behind for metaphysical abstractions leads to the confusion of real science and what is attempted as a science-metaphysics.

That the evolutionists recognize the size of their problem, when they apply their theory to man, is evidenced by the

apparent breakdown of the theory at this point. Evolution splits here into two evolutions—the regular one and the special one relating to man. There is confusion at this point so it is difficult to give any clear statement of the matter. Evolution is both continuous and temporal; it is eternal yet ends in man. The only logical thinker in the group is the out-and-out materialist, for with his eternal matter and force, and eternal creative evolution, man as a phase of matter fits logically into the system. The other group, who would respect the spiritual side of man must either admit two evolutions or deny the scientific tenets of the eternal conservation of matter and energy and the eternally continuous side of evolution. That the thinking of the latter group, even though inconsistent, is superior to that of the former will be admitted, but it is not as logical.

What evidence is given that man fits into this scheme of eternal evolution? Distinction must be made between quantitative and qualitative evolution. We can trace the latter but not the former in man. Man is not the sum of added particles or of quantitative, successive accretion. No fossil or organic half-man has ever been discovered and never will be. The search for the time or physical conditions, attendant upon the appearance of man, as man, is not the search for the origin of man. The gift of language may be noted as marking an epochal hour but this is not the history of man. The essential quality of man is wholeness. Just as the knowledge of space and time is knowledge of whole space and time and not the sum of atoms of spatial or temporal knowledge so is it with the other phases of man. Memory adds to its store facts and information

but the addition of facts is not memory. Memory is the whole and is distinguished from the growing sum of facts. The moral judgment, good-evil, right-wrong is not built up of a sum of moral judgments nor abstracted therefrom, but is the absolute in the midst of many individual judgments. Individual, moral judgments are possible only when the absolute is present. To judge an act right or wrong implies the general in relation to which the individual case is given quality. No occurrence is ever moral or immoral in itself—it becomes so when a personal relation is established. Judgments of value and judgments of moral value are two different things. Eating an apple is neither moral nor immoral in itself; it may become so when the act becomes related to other facts of personal experience. The mechanical, being impersonal, is never related to the moral nor should the organic ever be so related. It is possible to apply the categories of moral judgment to both mechanical and organic acts; but it should be noted, that such is done without any knowledge of fitness. To interpret the universal fact that individuals die, as meaning that a hen dies to preserve the race of hens is surely overworking the imagination and interpretative faculty or giving expression to an excess of sentimentalism.

So man on his religious side improves in religious quality but is not built up by accretions of atoms of religion. The development of religious thinking and advance in quality of life and civilization are not the development of religion. Distinction is well made to-day between the history of religions and the history of religion. The latter always recognizes the knowledge of the whole as the characteristic of religion. The study further reveals the quali-

ties of absoluteness and universality which go with the idea of the whole. The idea, God, and the history of the changes in the conception of God are two different things. The idea, God, is a whole idea, and never was nor can be a half idea which waits for the other half to be completed. The same holds true for immortality and all expressions of man as man. Even emotion is a whole and no carpenter's product.

It is for these reasons that evolutionists are forced to make an exception to their theory in the case of man or reduce man by definition to a materialistic automaton. The denial on their part then, of a special creation for man does not come logically from their premises. Since evolution ceases with the appearance of consciousness, especially human consciousness, the holders of this theory lose the right to draw any conclusion as to the origin of manspiritual man. On the other hand, the thinkers in the field of religion, whose philosophy of the universe based upon experience and reason centers in personality have the logic on their side when they declare for a spiritual creation with God as author. The fact of the matter is that there is no evidence that man as man has been evolved out of lower natural forms or organisms. The choice, however, remains of believing in the creative power of the physical universe or creativity by God or by God through the physical.

Some of the detail in the working out of the theory calls for careful scrutiny. The moral sense is characterized as an instinct like any other social instinct yet is a developed or modified one. The argument is added that it may be moral sense and as much God-given whether genetically it arrives by a process of slow development or is given by

single creative fiat. This is true if we consider it and evaluate it as God-given and forget the genetic history. But this is not done. The theoretical genesis is used to determine and explain the moral sense, and questions are raised as to the validity of moral idealism. It is declared to be instinctive action instead of conscious moral free action.

This evolutionary line of reasoning makes the initial mistake of not distinguishing between moral judgment and judgments of morality. The former is the judgment of the whole and absolute (not a generalized abstraction), while the latter comprises the results of the exercise of this moral judgment. The latter will vary and grow, and be modified by education and environment while the former abides changeless. Then having slurred over this distinction, the assumption is made of the historical succession from the lower form in instinct to the evolved modification in moral judgment and character. The reasoning, however, must either admit a miracle, a long, drawn-out, slow one, perhaps, or admit identity. If the instinct is different from moral judgment, then when it is changed it is no longer instinct; if it is morality in potentiality then the process is merely one of unfolding, and morality and instinct are identical except in degree. This fact then eliminates instinct.

But there are fundamental differences between instinct and moral judgment. One is, that, whereas the instinct of hunger, to choose one as illustration, is satisfied with food, the moral hunger is only whetted by temporal satisfactions. Instinct never reaches out beyond itself. The birds built their nests in Solomon's temple precisely as they do to-day.

There is satisfaction for instinct but never achievement much less progressive or qualitative achievement. Moral judgment is related to moral achievement. Moreover, the animal is no worse nor no better whether it eats or drinks but man is—whether he eats or drinks unto the Lord. Further, while instincts have a certain ability—not inerrant—to select the palatable from among the poisonous, there is no morality involved. Both life and death are facts of animal existence and there is no differential evaluation as far as nature is concerned. There is no morality involved in the death of a man at thirty or at sixty: the morality is present in the character of the man. Instinct may lead to the preservation of life or as it often does to the destruction of life, but the question of morality does not enter. Again, instincts are so "mixed, braided and fused" because their objects have become so developed that no single instinct can be isolated or enumerated. Lists of instincts or of primitive impulses of man are the result of a purely arbitrary process of selection. The judgment of moral value is on the other hand a whole judgment and single.

There is a must in both instinct and morality but it is physical in the one while it is spiritual in the other. The animal must eat or die but there is no must about whether it eat or die. Nature takes care of life and death, except where man has learned to interfere and direct her activities. But when a man says, How can I do this great wickedness and sin against God? entirely new and different elements enter. It is the spell of the invisible and eternal which calls forth willing obedience to the commanding must.

Instincts do not become morality but the moral consciousness educates them to fit into the ideal life. Thus it is, that the predatory instincts may be educated into cooperative, the selfish into serving unselfish ends and pugnacity into the hate of hate. There is no normal man, "dowered with the hate of hate," but men may be educated morally until this character is achieved. Moral character is not an endowment: it is an achievement.

Conscience is moral consciousness and is always related to authorities. It stands over against instincts and judges them. It is not an instinct. It always refers the moral judgment to an authority above itself. It never agrees that what is natural is therefore right. If we mistake not the meaning of christianity it is, that religion and morality are one and inseparable. Thou shalt love the Lord, thy God and thy neighbor as thyself. The note of authority then in conscience is the commanding influence of the Other World and its values in our conscious life. This speaks with a must in its voice. Increasing understanding of this world, and especially of the personal character of it, changes the character and quality of conscience, for conscience is not static. Sin is missing the mark, and men can know this only when they are conscious of the goal. The soul in which the revelation of the goal is the most advanced is the one which can speak of the exceeding sinfulness of sin. Thus conscience instead of being a modified instinct modifies and educates our instincts lest by being natural we miss the mark.

The question of the priority in time and value of the individual man or society cannot be answered off-hand. The preference for the social hypothesis is natural to the

scientist. The symbol of the organism would argue in this direction. It is no rejection of revelation to evaluate the early Hebrew philosophy which inclined towards the opposite view. The fact in each philosophy, both the science and the Hebrew, is, that it always takes two to make one. If there were ever one man there never was, except on the basis of the belief that God and man were socially related. It is another fact of life that a child kept from other human beings will never develop into the man as the other child does who lives with his fellows. Still further, men united in social relationship develop qualitatively and society therewith only when the relationship with the Other World is established. Society from one angle is the social nature which sees this world as being beyond us all, yet sees our unity in God. It is the vision which sees men as possible sons of God.

On the basis of these facts a view of the relation of the individual to society may be gained. Society is a relationship between individuals and not a tissue uniting individual units as far as we can observe. Physical contiguity, clan, tribal or family groupings, or bonds of social contract or necessity, constitute relation; but this is not society. This latter is a quality of this relation, and this quality is an achievement under the impetus of commanding ideals. A group is not necessarily a social relation, but the relations among the members may become social. This interpretation is based upon the teachings of Jesus, who saw in his vision the individual become more and more like God and the social relations so qualified that the kingdom of God would appear on earth. His vision saw this latter the result of the former. Men were to be born again, which

meant the attainment of the right dual attitude, that toward God and that toward man. The kingdom of God is in reality the kingship of God in the hearts of men, which, when realized means the brotherhood of man. The individual does not lose himself in society nor does society as such exist without the independence of the individual. The individual never loses his identity; but he may choose to sacrifice his physical life if by so doing his brother may be saved from missing the mark. So the man in whom the kingship of God rules lives in the highest and saving sense, when he continually seeks by every means to help one who needs it to achieve his destiny. This is service, which is not menial performance of deeds, but self-giving for this one end. The motive power which will achieve this ideal is the knowledge of God, whom to know is life eternal. The ideal society is that which is established when God and god-like men are related. The quality of this society is the same now on earth as it is of the heavenly society. There is a difference only in degree. Thus the evolution of the individual reaches a terminal only when men become like God. Society cannot improve or progress except as individual men grow greater. The individual never dies for society but he may for his fellowmen.

This same teaching may be urged as a christian interpretation of progress. Mere change is not necessarily progress. Mere creative evolution without purpose or value is not progress. Mere thinking may not spell advance nor growth. This conception of advance means change which moves nearer an end. The physical world may be in process of change but advance none. The essential fact in progress is the endeavor to reach a goal

which ever recedes. The reach exceeds the grasp. This goal is known yet not understood. It is a knowledge of the whole which is completing itself by fuller understanding. This in other language is the teaching of Jesus, that men of whatever race, or color, time or clime, who seek to know and do the will of God come into the line of progress. Their life is properly orientated, so that whether conscious of it or not, they progress daily. "When saw we thee hungry and fed thee . . ?" Unconsciously the christian character grows. Progress is not any mechanical rear push nor the results of the functioning of organic law. It comes as men achieve more and more the character, which as a whole is conceived of as the perfect one, but which is approximated daily in the struggle of life.

The teaching of evolution concerning immortality is certainly one which can find few reasons for acceptance. Since the fundamental reality for science is not personality, and personality is a derived product, it follows that the teaching cannot speak of the immortality of man. Evolution to be logical and keep in mind the basal canons and laws of science must blur the distinction between mind and matter, between the world of nature and the world of man, the natural and the spiritual, and virtually reduce mind to a functioning of matter. Since science can find no soul different from the mind and the body, our emotions, memory, character and ideals must be identified with bodily changes. Sin and crime are thus largely physical brain defects. Thus the destiny of man is the destiny of the germcells which make up his body or of the eternal matter of which he is phenomenal change. Of the two age-long

views of the soul, creationism or traducianism, evolution naturally prefers the latter. The soul is born with the body, grows with it, but disappears at death when the body returns to its original dust. The plain teaching of evolution is to deny personal immortality.

There are efforts on the part of some to save the situation but these are feeble and unconvincing. Some say boldly that man is immortal, but they mean physical immortality and nothing more. Some would declare that the individual lives on in society; but nothing better is offered as the future of society. Mere prolongation in time is not personal immortality. There are those who try to identify immortality with the question of progress, but progress to what is not outlined. Change from the simple to the complex, from individualistic conceptions of the future to certain social ones is not necessarily progress. The goal of the preservation of the race is not given any attractive value, since no reason is given for this aim or valuable end served. Of what value would be the self-sacrifice of a man for the race if there is not individual, personal immortality involved? No scientist has yet tried to prove, much less teach, that the race is immortal. Still others would have it that evolution has washed its hands of any further responsibility concerning our destiny and the future is in our This abandonment of the problem does not help the case when the validity of the theory of evolution is at stake. Then, there is the general offering, that we do not know and cannot know, yet one may believe if he desires so to do. This gives very little encouragement to believe.

Thus the conclusion stated dogmatically at the outset seems valid that the teachings of evolution concerning re-

ligion, God, man and immortality, are not only often inconsistent in themselves, but they negate all these great verities and fundamental beliefs. They lead to skepticism, they present no positive grounds for either an adequate conception of God and man or for any value in living.

CHAPTER TEN

THE REAL CHRISTIANITY

"Can this religion of science and evolution be incorporated in the organized religions of the civilized world? The religion of evolution is nothing new, but is the old religion . . . of Christ, which strives to develop a better and nobler human race and to establish the kingdom of God on the earth." The religion of science is thus the real christianity and demands a place among the organized religions of the world. Here speaks the spokesman for a great multitude of modern thinking men. If true, then science has made the great discovery of the age and has conferred inestimable good upon mankind. To have come to know the real christianity is a real achievement.

On what grounds, it must be asked, does the religion of science (or evolution for this means the same thing) make this claim? The main contention is that herein christianity has become the religion of reason and science. It has been rationalized. It is made the power for individual and social progress which its founder intended. The false identity of literalism and formalism with the christian religion is exposed and banished. Instead of making intellectual assent to a formal creed the test of righteousness, christianity is now revealed in its true light, which is dedication to a life of service. The true spirit of Christianity

¹ Conklin, pp. 242, 246.

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is now disclosed, which is the demand for uniformity of aim, not of belief; the best available truth and not absolute and perfect truth; evidence and not authority; works and not words. Christianity is further revealed as being both a personal and a social religion, in that, in all things except spirit and purpose religion may be once more a personal matter—when love of God and love of fellow men will be the one requirement for mutual fellowship and service. Christianity is redeemed from all supernatural associations and revealed for what it really is—the kingdom of God on earth. The teachings of evolution concerning creation, the natural and the supernatural, religion, God, man and progress are the real christianity.

What is the motive power which will make this modern religion acceptable to men and what is the means whereby the kingdom of God is to be established upon the earth? The motive power is the conviction that the essence of Christianity has been discovered, the lead of reason, and the vision of the future. There are to be unnumbered ages of human progress upon the earth, ages of greater justice and peace and altruism. The sense of coöperation with Christ in carrying on this continuity of unnumbered ages is the culminating urge. The methods then to be followed are: improve conditions of individual life, develop and educate individuals, improve ideals of society, and breed a better race of men. We may accomplish these results.

Plainly stated then, christianity is seen in its purity among intellectual men; its essence is its rationality; it is the worship of the true, the beautiful, the good; it means the kingdom of God on earth, which means better living conditions, more education, better social conditions and a

better breed of men. Education, social service, eugenics, euthenics is christianity in action.

Three vital questions are here forced to the front. The first is the general one which concerns itself with the identification of the religion of science with Christianity. The second relates to the identification of the Christian religion with one's private individual beliefs and convictions. The third is the practical identification of christianity with the cult of social service, with its thought for environment, society, eugenics, euthenics and programs of social betterment.

The answer to the first has already been given. A religion which virtually negatives belief in the God of Jesus of Nazareth, denies immortality to man, except of his body, and rejects the christian evaluation of man, to speak of nothing further, is certainly not the christianity of Jesus. The claim that it is, cannot be made upon any likeness between this new ism and christianity, but is the product of external causes. These are the individual desire of certain thinkers and the individualistic shaping of the principles of science. Professor Conklin is one of the individualistic evolutionists who profess to follow science but in reality abandon the basal canons, laws and beliefs of science. Evolution is to him no longer a theory but a set of teachings; and as these get farther and farther away from science they become fairly good preaching though unrelated to the text. Christian education and environment are in him too strong for the inherent and inevitable, negative and skeptical results and bearing of the theory of evolution and the dogmas of science. For sooner or later it

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must be recognized that science, neither in observation, experiment nor legitimate theory can deal with the spiritual nature of man. The theory of evolution confessedly breaks down when it approaches this fact. When overbold thinkers refuse to recognize legitimate limitations, the inevitable result is the reduction of our real life either to a shadow, a functioning of matter, or race continuity with no definite goal in view but the immortality of matter. Neither science nor evolution have any message for spiritual life. Hence the so-called teachings of science or evolution must always be evaluated first from the standpoint of the author of them—his tendenz. Such teachings, further, must not be confused with the scientific theory of evolution.

The other two questions are phases of this first one. We can trust these over-enthusiastic, dogmatic teachers to defeat themselves finally; but when the added strength of science is given to these two very prevalent conceptions of christianity, truth in the matter should be all the sooner sought and clarified. More light on the first of these two may be discovered by a review of individual views and by referring to some historical facts.

The question, What is christianity? is demanding an answer. Our age is mentally and spiritually alive, so is not willing to take traditional or authoritative answers uncritically. It is a mark of life and growth that we are passing this ever-recurring question through the alembic of our own consciousness and have determined upon an answer that will satisfy us. It is not a question that can be dogmatically answered, but the many attempts that are

made will doubtless advance us nearer the truth. Many answers have been given.

The view that Christianity is an absolute, ab extra, original and complete, divine insert into history, an absolutely God-given revelation with no human conditioning, does not seem to fit with the historical facts and historical origin. The philosophy of absolute separateness at the back of this view throws it out of accord with actual history. Christianity is not the only religion but, as we think, it is the superior one. The Lutheran conception, that Christianity is a divine deposit, essentially complete at first, and resident in the scriptures, is this same view, with the exception of the present place of residence of the divine deposit. This view does not take into account human experiences, historical circumstances and the fact of development. That christianity is the teachings of Jesus and the Apostles would make it a type of metaphysical speculation and religious knowledge but leaves no room for progress. view makes the new assuredly the untrue, for christianity has been encompassed and expressed and guaranteed in this original collection. It also does not give an adequate place to Jesus of Nazareth in the definition. The concise statement of Cardinal Newman that christianity is a revelation, supernaturally revealed but humanly conditioned, is a move in the direction of modern thinking, which sees the historical and developmental side of our faith. Baur and the Tubingen School applied the historical viewpoint rather narrowly when they declared for a set of dogmas or intellectual beliefs which are the result of the conflict of the philosophical and religious ideas of the day. This view however emphasizes the fact that any movement necessa-

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rily expresses itself in certain dogmas or intellectual beliefs. These however it must be seen are the dress and not the body.

There are scholars who take still other and differing views. Christianity is a religion just like any other religion, whose value, if superior, can only be established by historical evaluation. It is a peculiar type of religious consciousness realized within the community of christian believers, the product of the human spirit rather than any divine insert. This view has the special merit of calling attention to the fact that wherever christianity is surely discoverable, there, will be seen the repetition though not literal of the religious experience of Jesus himself. Harnack emphasized the fact that Christianity is essentially a life, but he overemphasized the view to the beclouding of the fact that there can be no life without its dress in creeds, forms or beliefs. Abbe Loisy viewed early christianity as formless, simple experience, hence concluded that the best definition is that of collective experience. The Gospel spirit remains unchanged, yet christianity is more a fact to-day and is better understood and lived than it was in Apostolic times. The growth side was especially prominent to his vision. The most recent view is what may be called the developmental one in which the influence of environment is noted and the whole christian movement is seen as a phase of historical religious development.

A survey of these various efforts at definition reveals a great variety of conclusions and of observed phases of the object defined. Is christianity then a life, a collective experience, a divine insert, a set of intellectual beliefs, a

supernatural revelation, a peculiar type of religious experience or a distinctive phase of historical religious development? The variety of views is a tribute to its greatness. Perhaps it is all of these and more. One thing seems certain, which is, that while we must shape our own definition, Christianity is more than any individual conclusion.

From the historical standpoint the attempt at a definition of christianity would begin with Jesus of Nazareth. His personality (real and not metaphysical), his life and death and his teachings constitute the core. The impression of his personality has caused and is still causing many attempts at expression and definition. We have in the gospels at least four different ways outlined, by which the men who knew him tried to give intellectual expression to their belief in his divine character. There are many and differing interpretations of his teachings and of his life. Some of these intellectual expressions and interpretations have hardened into creeds and authoritative ecclesiastical dogmas. By many these latter are identified with christianity, and when some of these forms are seen to be out of tune with fact many think christianity disappears. So, too, when the life has escaped and the note of authority grown more sonorous men of spirit and intellect rebel. The men of this age have not had the abundant opportunity to know the real personality because He cannot live in formalism, ecclesiasticism, materialism or forms inharmonious with the times. One of the results is this turning to what is named social servce as an outlet for subdued hungerings.

There is one other fact germane to this study. Jesus'

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definition of religion is phrased simply in the love of God and neighbor; but this is not a mere intellectual belief or dogma. It is his life. He, in his spirit and actual living inbreathes the definition with meaning and content. No man can take this definition as truth, and understand it as a definition of Christianity, who does not know somewhat of the One who not only spoke it but lived it. There is no teaching of Jesus that can be understood in the christian sense in the abstract. Jesus and his teachings are one.

The bearing of these facts upon some of the great truths that men live by is significant. Jesus must have known God in a peculiar sense, for he is the only one of history who has been able to say, "I and my Father are one," and find men ready to believe it. For almost two thousand years now men have been satisfied with the God Jesus thus revealed. God is not the product of emotion, nor a desired belief, but the eternal, existent Father of mankind. The greatness and we may say the success of Jesus was his companionship with God. Thus to attempt to negate or detract from the existence of God is to strike at the very roots of christianity. Jesus is a teacher and Savior of men because of his relation to the eternal God.

God, to Jesus is also, not merely an intellectual or emotional Great Companion, but is both supernatural and immanent in this world. He is supernatural, since he is wisdom and purpose; yet he is not aloof. He does not take men up out of this world, but his providence is manifest in that they may be kept from the evil. Jesus' view of God and his relation to this world—if we mistake not—might be stated as the belief that the primal Reality of the universe (qualitative judgment) is Personality, which is God.

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Philosophy would, I believe, endeavor to prove that immanence without transcendence is an impossibility.

Man occupies a position of great dignity in Jesus' teachings and the conviction is further evidenced by his acts. This belief of Jesus is not due entirely to the influence of the narrow view current at the time, that this earth is the center of the universe and the only populated spot. He could believe nothing less concerning man because of his conception of the purpose of God and his knowledge of man. Men could know God and to know him was life eternal. Hence the dignity and immortality of man are realities. Man is the master of his destiny when he knows the meaning and purpose of life. The knowledge of this meaning and purpose and the knowledge of God are one. Hence our individual views and convictions concerning christianity to approach truth must take cognizance first of all of the historical and experiential facts in the matter.

Is the essence of christianity social service? The emphasis placed by the gospel writers upon love to one's neighbor, as well as upon love of God has been interpreted in modern language as social service. There exists to-day a cult known as the social service cult. The membership is made up very largely of persons outside the church and of organized religion. These persons are not atheists nor are they irreligious, selfish nor unspiritual, but men of respected worth and goodwill. They think they have the substance of religion and are living the real christianity through social service. They likewise feel that they can dispense with any formal worship and with the formal and creedal side of religion as well. It matters not, they argue, what a man believes as long as he is good and engages in

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some form of social service. Among all the phases of religion this one is singled out and made the whole. The one who dares to evaluate this cult is usually regarded as lacking in the humane temper and the appreciation of the social side of religion.

The cult nevertheless must be evaluated for the sake of all the good people in it. The critical examination moreover will not consist of the argument ad hominem, though the suspicion is frequently present, that the great love some men bear to humanity is to humanity in the abstract and not to actual men. It is this esthetic emotion such as is aroused at the theater which produces what has been termed the sob stuff. The attention paid criminals is often inspired more by the criminal than the actual man. Charity balls and raffles are of course religious affairs. Every good thing has its imitations.

The evaluation of this cult is surely quite easily arrived at. Men love their fellowmen because God does, because of the value God places on each human being and because in the larger family all men are brothers. Thou shalt love thy neighbor as thyself. This is the spring of social action. This inner love issues in actions both negative and positive. Negatively no man should rob, cheat, lie to, maltreat or treat his fellowman as though he were something less than one of God's children. The christian spirit aims at justice, which can only be arrived at when there is an adequate conception of God's values—especially of the worth and dignity of man. Personal values are the norm for all moral and social judgments. Positively the christian man will do unto others as he would they should do unto him. This is positive love. This positive action is

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always directed toward persons and not society. Society in the sense of social righteousness and idealism is the byproduct in Christianity and never the central theme. To try to think of society progressing while the individual has passed his zenith is to think of a town growing with the inhabitants dumb or growing worse daily. Jesus never visualizes any abstraction or metaphysical tissue. He saw men made over and developed into the image of the Highest. He never talked of redemption but did much of redeemed men. He saw the possibility of the full kingship of God in the hearts of men (interpreted by the author of Luke as a worldly kingdom of God) and he urged that this express itself in deeds toward our fellowmen. A changed world would then ensue. The blesseds of the Sermon on the Mount do not say for society, but blessed are the peacemakers for they shall inherit the kingdom of God.

Such is the christian motive and socialized individualism. What now is the good aimed at? Jesus, we are told, was interested in human suffering and joy, in all human concerns as well as in the inner religious thinking and experience. But just here the fact is too often overlooked, that, as far as we can discover he never considered such social service an end in itself. The cup of water is given in my name. Every deed he did or conversation he held issued in a renewed or deepened religious life. Were there not ten cleansed? But where are the nine? But one returned to praise God. The end of social service is that men shall come to know and praise God.

Men, however, were not expected to arrive at this goal by chance. The christian social service is characterized by a certain method of approach, a certain spirit and the

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expectation of achieving the desired end. The social service is to serve the end that men might not miss the mark but come to themselves and realize their sonship.

Evaluation may now be made. It is the great mistake to identify religion and social service as though social service were the whole of religion. Whoso does this misses religion because he mistakes a means for the end, the part for the whole. He misses the absoluteness which is the essential mark of religion. He may miss both the motive and end in social service. The judgment might be hazarded, that the cult of social service will not last long where the element of worship is absent. The futility of social service which is not inbreathed by the christian motives and expectation is apparent. Better environment, more education, purebred stock, do not necessarily produce better or qualitatively superior men. It is the tragedy of such improvement that the intellectual and the wealthy classes of society are the self-suicidal ones. It seems as difficult for the intellectual as for the rich to enter the kingdom of God (that is welcome the kingship of God) as it is for the camel to go through the needle's eye.

CHAPTER ELEVEN

CONCLUSIONS

THE results of the critical study of this new ism may now be summarized with the conclusions which seem to follow.

It is stretching the truth beyond recognition to use the title *Religion* of science or *Religion* of evolution.

Because religion is given small recognition. The supremacy of religion is overlooked. To identify religion with science is to lose religion. Philosophy or theology not rooted in passion, fact and institutional life misses religion. The facts of life are not made friends by being pressed into a system of thought. The truth offered is not warmed by personality. Rational culture is not a universal human property. There are no hidden resources to give the movement perpetual freshness. Religion is rationalized when referred to sources of its own kind, not when reduced to something else. There is no relation established with his-The teachings are not the authoritative toric religion. ones of the religious soul, but come by way of theory. There is little of the element of faith. Religion is not merely knowledge, reason, emotion, intellectual beliefs or metaphysical speculations, but is more. Explanations are not religious motives or inspirations and much less so when they do not explain. Religion is not escape but conquest. It is not only rational knowledge or explanation but a

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sense of companionship and partnership that removes the strain of life. Idolatry of science is not religion.

The sources of strength in the movement are not discoverable in the religious and moral values claimed but in other outstanding characteristics.

These are the dogmatic tone, the great gifts of real science, the favorable attitude towards science, the apparent simplicity, the hitherto uncritical attitude towards science, the general favorable attitude toward the scientific method and the fetich of the love of truth. With the exception of the first all these other sources of strength are illegally used to help propagate certain teachings.

The results were this religion to prevail would be anything but desirable.

It certainly leads to pessimism and skepticism. Because human interests are overlooked. There is an over-emphasis upon the animal side of man. Religion is reduced to the class of left-overs and is related to emotion and ignorance. The deductions are too metaphysical to be of value. The most tremendous conclusions are based upon insufficient evidence. The explanations of God, man and the future rob men of faith and hope.

Its principles would lead to war because the eternity of struggle does not lead to perfection of individual character and immortality. The survival of the fittest is easily interpreted, as the will to survive by any means, or when a nation considers itself the fittest the corollary is, it must dominate by any means.

It would reduce religious fervor. Because men cannot be enthusiastic for the abstract, the negative, Law or Force. The self-sacrifice noted is not completed by delineation of

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the worthy end. There is no relation established or unity with personality. The controversial element is too prominent.

It would strengthen the ideal of state control. Because the individual is swallowed up in an abstract society. The individual exists for this society. The ideal of organization is emphasized. Individual equality the basis of democracy is denied.

It would lead to materialism. Because the quality eternal is predicated of matter and absolute of physical law. The good is not characterized as opportunity but as mechanical surety. The distinction is not made that while the world has its nature the human self achieves character. Ideals and soul values are reduced to a form of matter.

It is a religion for the select few only. Because it is based upon metaphysics and theory and not on personal knowledge of God or conquest of life. It requires esthetic and artistic appreciation to worship truth, goodness and beauty. The main motive discernible is to correct theological thinking, not to create religious life.

Terms and words used do not connote what they do in religious thinking.

Death is not necessarily sacrifice. This term means the deliberate choice of death because continuity of life is of less value than something else. Selfishness is not self-preservation but the valuing of one's self above what are higher values. There is no selfishness where knowledge of these higher values is absent. Coöperation is the deliberate agreement and arrangement made between two or more persons to act together for mutual benefit. It is always a conscious arrangement and is the product of an ideal. As-

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sociation, relation, organization, working together, are not coöperation.

The solution of evil proposed will not work. Because the rational cure still leaves evil present and active. The religious solution is the overcoming of evil with good, which means the disappearance of the evil. The way of overcoming is through belief in the absoluteness of the good and companionship with the Personal Good. Men must turn away from the evil, cease to do evil, learn to do good.

In many other ways the religion will not work. Because man cannot constitute himself his own providence. Only those men who have gained strength from on high have moved the world. Men never conquer by fighting until they have conquered in the self-fight first. It is not as a man thinketh but as he thinketh in his heart that man is man.

Questions may be raised as to whether the claim to being truth can be substantiated.

Truth works. The religion which produces the results noted can hardly be truth. The religion is said to aim at establishing the kingdom of God on earth, yet individual men have reached their zenith and the only abiding reality is the germ-cell. The realities of this life are obliterated. Subtle religion is false religion. The ethics is prudential. It is ever reaching for that which it denies. It assumes that human nature is essentially good. No man sucks his morality from the flowers.

That it is not the real christianity with God, man and immortality left out is apparent.

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